WHY MEN WORK:
MOTIVATION THEORY IN APPLICATION

Karl H. Hutzler

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by

Karl H. Hutzler

Bachelor of Science

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Thesis directed by

William G. Wells, Jr., M.S.

Associate Professorial Lecturer in Business Administration

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. . . man doth not live by bread only.

Deuteronomy 8:3

. . . the primary function of any organization, whether religious, political, or industrial, should be to implement the needs for man to enjoy a meaningful existence. For the first time in history we have the opportunity to satisfy man's inherent wants. Yet what value is it to man, if industry manufactures comfort at the expense of human development and happiness?

Frederick Herzberg

. . . people would be refreshed and renewed if they could wipe the slate clean and do one little thing that they really cared about deeply, one little thing that they could do with burning conviction.

John W. Gardner

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CHAPTER I

INTRODUCTION

Statement of Purpose

The objective of this paper is to examine ways that motivation theory can be applied. Volume after volume of theoretical writings have addressed themselves to the question of what motivates men to work. It is believed that by examining those principles and features of theory that have actually been put to work in "real situations," one can get a feeling for what parts of theory are most useful and applicable. It is not intended to add to existing theory, nor is it expected to find the ideal combination of motivational ingredients. Rather, it is intended to compare programs of motivation measurement, appraisal, and evaluation, as implemented by leading--and hopefully representative--American industrial and commercial organizations. This comparison, and an analysis of the key features of those programs, should point to the relative importance that management has given to motivating workers on the job.

Subject and Scope

Motivation is an elusive concept. It is difficult to relate to performance; it is virtually impossible to quantify. But it is important to an organization because it can influence the eventual

success or failure of a project, or the degree with which financial objectives are reached. Therefore, there has been a constant attempt to explore the limits of the concept. In recent years this exploration has been the area of concern for the social psychologists--the "behaviorists." They have indeed had the greatest influence on the development of the many theories of organizational behavior as related to individual behavior with the organization. It is within these theories that motivation is examined in this thesis.

It might be helpful to explain that the word motivation is derived from the Latin movere, "to move, to set in motion."[1] It is implied that to motivate means to "move someone to do something," or to set a train of interrelating events in motion. The definition goes on to include "disturb," "change," "shake," "influence," and "provoke," among the many meanings of the Latin verb. It is these words that are most easily understood in the context of the behavioral sciences. In this sense it is the understanding of behavior (of an individual, such as the worker or the shop foreman or of an organization, as expressed in official policy) that is salient.

Paul T. Young makes the following observation, however:

> The study of motivation is not restricted to the process of evoking behavior; it includes an analysis of the conditions which sustain activity and which regulate and direct its patterning. An important problem, in the

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[1]Collin, Latin-English: English-Latin Dictionary, 1st Edition, 1957, p. 208.

> study of motivation, is accounting for the purposiveness of behavior.[1]

Young seems to imply that there are two principal factors that make up the meaning of motivation: behavior itself, and those influences which cause that behavior to be what it is. This idea is further stressed by Robert Dubin when he defines motivation as "the complex of forces starting and keeping a person at work."[2]

It is important here to remember that whatever constitutes motivation,[3] it is composed of mechanisms inside a person that sustain his continued activities as a human being. These "mechanisms," some of which are natural and some of which are learned, are evident in human behavior at an early stage of development, and it is almost from birth that we express our motives in readily understood terms.[4] Later in life, as applied to man's relations with his fellow man, these same mechanisms greatly affect his activities as a worker, or as a manager of workers (a manager is also a worker, of course), and his activities in every other walk of life. As it does on the job, motivation determines one's performance as a parent, as a tennis player, and as a back-yard gardener.

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[1]Paul T. Young, Motivation and Emotion: A Survey of the Determinants of Human and Animal Activity (New York: John Wiley & Sons, Inc., 1961), p. 17.

[2]Robert Dubin, The World of Work (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1958), p. 213.

[3]The theoretical thoughts as expressed by the principal writers on the subject are too many to form one firm definition.

[4]Arthur T. Jersild, Child Psychology (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1960), pp. 175-176.

The allusion to man's relationship to his fellow man leads to the observation that virtually all of human activity revolves around the concept of activity in a group, which is"at least two people interacting,"[1] or in an organization, "the coordination of the activities of a number of people for the achievement of some common purpose or goal."[2] This stems from the following fact:

> . . . an individual alone is unable to fulfill all of his needs and wishes. Because he lacks the ability, strength, time, or endurance, he finds he must rely on others for help. As several people coordinate their efforts, they find that they can do more than any of them alone could have done.[3]

Since much of our activity is organization oriented, albeit on different levels,[4] it becomes necessary, for the purpose of this study, to view motivation in an organizational setting. The process of motivation shall be considered as an exchange between a person and his social environment. As related to worker motivation this concept is closely related to that of the psychological contract, which implies that an "individual has a variety of expectations of the organization and that the organization has a variety

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[1]Clovis R. Shepherd, Small Groups (San Francisco: Chandler Publishing Company, 1964), p. 2.

[2]Edgar H. Schein, Organizational Psychology (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1965), p. 8.

[3]Ibid., p. 7.

[4]Gordon L. Lippitt, in his Organization Renewal (New York: Appleton-Century-Crofts, 1969), discusses the concept of human interaction within the social system as being of "working relationships" in any size organization.

of expectations of him."[1] This includes a general pattern of rights, privileges, and obligations, as well as the notion of authority and consent. It is in this light then that organizations shall be viewed. And it is in its relationship to the individual as a part of an organization that the effects and roles of motivation shall be examined.

A Target for Comparisons

The very nature of the field of motivation is one that is at times confusing and certainly ill-defined. Because of the fact that writings and research findings proliferate almost daily, one has to search through voluminous amounts of material, a task of no small proportion. Gaining exposure to all available material would be revealing indeed, but by necessity a process of selection becomes more realistic. By selecting those theories most relevant to the application of motivation by the manager it is intended to show how the research and the study of the academicians has developed some realistic guidelines for the practicing manager. And it is he, after all, who must be concerned with knowing just what it is that motivates different people to do different things at different times. In its approach to motivation theory industrial management can in a fitting analogy be compared to the military profession: while generals scheme and make plans deep in the caverns of the Pentagon, young Platoon Leaders and Company Commanders are in the field, often facing the enemy, and are charged with the

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[1]Schein, op. cit., p. 11.

implementation and careful use of those plans in order to insure success.[1]

In order to make it useful, knowledge must be condensed, or distilled, so as to allow "getting at the heart of things." So it is with motivation theory. Victor Vroom, in his book Work and Motivation, which may well be one of the best known in the field, states that "there is a pressing need for some kind of organization and integration of existing knowledge in the field of work and motivation."[2] While it is not pretended to have the formula needed to achieve that integration, it shall be attempted to compare theories in application with that purpose in mind.

Parameters of Thesis

Starting with the hypothesis that men work for reasons other than paychecks, it is assumed that there are sundry reasons why most of us go back to the same routine. "What do people want from their job?" inquired a team of researchers directed by Frederick Herzberg in a series of studies. The answers, ranging from "feeling happy with my job" to "professional growth," are grouped by Herzberg as "hygienic" factors of job satisfaction. Much like medical hygiene, he sees the pleasures--or displeasures,

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[1]For what is perhaps the most lucid and up-to-date portrayal of the professional soldier in a world of change, see Morris Janowitz, The New Military (New York: W. W. Norton & Company, 1969). He devotes several chapters to military management, and much discussion of military motivators.

[2]Victor H. Vroom, Work and Motivation (New York: John Wiley & Sons, Inc., 1964), p. 5.

if workers are dissatisfied or unhappy--as pertaining to the mental and social health of the individual and the organization.[1]

The job may cause happiness and satisfaction, or it may cause grief and misery, but it is the job, together with the nature of the ingredients of that job, that is most responsible for positive or negative attitudes. And this is the crux of motivation.

This thesis is made up of two parts:

1. The information available through secondary sources dealing with motivation theory and with management theory; and

2. Reports on applied motivation theory as it is implemented by specific major companies.

In efforts to arrive at a meaningful comparison of how different industrial and commercial enterprises have approached the subject of motivation, the personnel managers of forty-four corporations were contacted.[2] Responses, in the form of letters ranging in depth from "we've never concerned ourselves with that subject,"[3] to extensive and detailed programs outlining management philosophies, were received from twenty-nine of the companies. This material gives an interesting insight into the importance of worker motivation as perceived by various concerns.

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[1]Frederick Herzberg, "The Motivation to Work," in Readings in Management, ed. by Ernest Dale (New York: McGraw-Hill Book Company, 1965), pp. 305-307.

[2]See Appendix A for list of companies contacted, together with type of reply, and for sample letter requesting information.

[3]Penn Central, the largest representative of its particular industry, replied that "no attempt has ever been made to study our employees' motivation."

Organization of Study

This thesis attempts to trace the history of the major developments in the field of management as they influence workers' behavior on the job. Answers to the following questions will be sought:

1. What historic management developments are important to a study of motivation?
2. How have the developments of the human behavior school altered the understanding of motivation?
3. What sociological implications are there in the practice of contemporary management?
4. What motivates?
5. How is motivation theory applied in American industry?

Chapters II and III attempt to trace the growth of management as we know it today, citing the major developments in both the scientific and behavioral schools as contributors to the present state of the art. In Chapter IV the main elements of motivation will be examined, showing a correlation between the willingness to work and factors such as pay, leadership, communications, and budgeting.

Motivation programs as practiced by leading American corporations will be described in Chapter V. They will be compared with each other and with existing theory. An attempt will be made to gauge the relative importance placed on the writings and teachings of the leaders in the fields of management and psychology. The final chapter will contain a brief summary of findings to synthesize the key elements of the completed study.

CHAPTER II

HISTORICAL BACKGROUND

The Birth of Management

No study of management would be complete without an historic base. But, being that it is an emerging science and a fledgling profession, management has a rather brief "official" history, going back to roughly the year 1900. A comprehensive history, however, would touch on all of the events which influenced the development of thoughts and ideas we now know as management principles. This would lead to a history of mankind, which obviously cannot be entered into here.

One can go back in history to the most ancient civilizations, the Sumerians, the Egyptians, or the Chinese, to find examples of management techniques applied to the problems of the day. The Bible is full of stories of great leaders managing great events, as well as great amounts of money and other resources including vast throngs of people.[1]

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[1] I Kings 5, an account of the building of Solomon's temple, is just one fascinating story of "applied management" found in ancient literature. A seven-year project, it required the wealth of a king to hire the labor of the thousands of workers and artisans who fashioned the lumber, stone, and precious metals that went into the building. It was, in the least, an awesome endeavor. Imagining the technology available three thousand years ago one can only conclude it to have been a fantastic job of managing men, money, and materials.

In short, management has been a very real part of the activities of the leaders of men for a long time. However, an understanding of what management is, and of what value its methodical and systematic application can have to achieving one's goals, was not to be formalized into a "scientific" method until the twentieth century.

The Precursors

The beginning of "modern" management is perhaps found in the industrial revolution, which, because of its widespread implications, was in fact an equally important social revolution as well.[1] Men's lives were changed through impacts never before imagined, and were never again to be the same.

The first awareness of the need to examine the social implications of economic realities and developments was felt by the classical economists of the eighteenth and nineteenth centuries. Three merit particular attention.

Adam Smith (1723-1790)

Published in 1776, Adam Smith's Wealth of Nations[2] ranks as the great classic of economics literature. Espousing liberal views during a time of great conservatism in England, he is generally credited for laying the groundwork for many of the concepts and principles of present-day economic doctrine.

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[1]Joseph L. Massie, Essentials of Management (Englewood Cliffs, N.J.: Prentice Hall, Inc., 1964), pp. 11-13.

[2]Adam Smith, An Inquiry Into the Nature and Causes of the Wealth of Nations (New York: P. F. Collier & Son Corporation, 1937).

From Smith's viewpoints of management and the managers' relations with their workers have evolved his great contribution, his explanations of the benefits of the division of labor:

> First, the improvement of the dexterity of the workman necessarily increases the quantity of work he can perform; and the division of labor, by reducing every man's business to some one simple operation, and by making this operation the sole employment of his life, necessarily increases very much the dexterity of the workman.
>
> Secondly, the advantage which is gained by saving the time commonly lost in passing from one sort of work to another, is much greater than we should at first view be apt to imagine it.
>
> Thirdly, every body must be sensible how much labor is fascilitated and abridged by the application of proper machinery. It is unnecessary to give an example.[1]

It seems almost as though Adam Smith could see and understand the future! And as an economist with a profound understanding of the mechanisms that shape the events of history and of man's behavior, perhaps he did. He forecast industrialization with its benefits and its problems. And through his concept of the division of labor he predicted the greater human efficiency and performance that the greater technology of the future would demand.[2] In addition, Smith also understood the motivators of work, particularly in regard to wages promising a better life:

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[1] Ibid., pp. 13-14.

[2] In an interesting aside, it was Thomas Jefferson, who incidentally also achieved some measure of fame in 1776, the year of the publication of Wealth of Nations, who applied the principles of division of labor to the management of his estates, slaves, and properties. Because of his sometimes less-than-comfortable financial condition Jefferson was much concerned with new management techniques which would enable him to minimize expenses while keeping his workers happy, thus loyal and productive. In this manner he was able to continue the image of "landed gentry" comforts during difficult times.

> The wages of labor are the encouragement of industry, which, like every other human quality, improves in proportion to the encouragement it receives. A plentiful subsistence increases the bodily strength of the laborer, and the comfortable hope of bettering his condition, and of ending his days perhaps in ease and plenty, animates him to exert that strength to the utmost. Where wages are high, accordingly, we shall always find the workmen more active, diligent, and expeditious, than where they are low.[1]

Thomas Robert Malthus (1766-1834)

Malthus was the son of a wealthy landowner, and as such a member of the upper, or ruling, class. Because of his station in life he could afford the time and the money to study for his life's vocation, the clergy, and for his lifelong fascination, the subject of economics. His economic theories, well-developed and soundly stated, were published and called Principles of Political Economy. It is his most respected, but also his least-known, work.

Few of us think of Malthus the economist, but rather of Malthus the social philosopher, predicting the doom of mankind through over-breeding. In Population: The First Essay, published in 1798, Malthus stated his well-known concept that "Population, when unchecked, increases in a geometrical ratio. Subsistence increases only in an arithmetic ratio."[2] Consequently he sees no way out of the eventual dilemma which will see "the whole surface of the earth covered with a solid mass of people."[3]

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[1]Smith, op. cit., p. 83.

[2]Thomas Robert Malthus, Population: The First Essay (Ann Arbor: The University of Michigan Press, 1959), p. 5.

[3]Ibid.

Malthus saw the greatest sufferer of the choking population growth to be the worker, especially the one "of the lower level." With no chance to better his station in life, and with too many of him to provide jobs for all, he would be doomed to early extinction as the price of labor would continue to fall. Workers would thus never live at anything better than a minimal subsistence level. At the same time Malthus felt that a day's work was a day's work, and that any labor was interchangeable with any other. In this sense Malthus' theory was a direct contradiction to Smith's. Further, Malthus saw the only incentives and motivation to be a reduction of population, thus a reduction of the available labor force, together with an upward climb of wages.

Being both a futuristic economist and a traditional Anglican priest, Malthus no doubt had some difficulty in justifying his theories of population with his teachings from the pulpit. Preaching calamity with his pen may not always have come easily, and he no doubt had second thoughts leading his flock in prayer, thanking God

> . . . Who hast blessed the earth that it should be fruitful and bring forth whatsoever is needful for the life of man, and has commanded us to work with quietness and eat our own bread.[1]

David Ricardo (1772-1823)

David Ricardo grew up in a world of business and finance. A long-time member of the London Stock Exchange, he had ample opportunity to observe and study the economic conditions of his

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[1] The Book of Common Prayer, Prayer for Fruitful Seasons.

day. At the same time he was a thorough and diligent student of his economist predecessors, including Smith and Malthus. Based on the ideas of their writings, as he translated them to the realities of his world, Ricardo published his The Principles of Political Economy and Taxation in 1817.

Most strongly influenced by Malthus, Ricardo asserted that wages would assume a naturally balanced stance which would cause them to never be any higher than absolutely necessary for subsistence of the working class. Ricardo's "Iron Law of Wages" states that

> . . . the power of the laborer to support himself, and the family which may be necessary to keep up the number of laborers, does not depend on the quantity of food, necessaries, and conveniences become essential to him from habit, which that money will purchase. The natural price of labor, therefore, depends on the price of the food, necessaries, and conveniences required for the support of the laborer and his family. With a rise in the price of food and necessaries, the natural price of labor will rise; with the fall in their price, the natural price of labor will fall.[1]

The natural consequence, then, of the rise and fall of wages, is to insure that base subsistence levels, according to the Malthusian philosophy, are maintained.

Ricardo did not concern himself specifically with the application of his principles to management. He assumed that it was capital, and its availability or lack of availability, that controlled all business activity. Accordingly, capital, and not management skill, is the key factor in the success or failure of

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[1]David Ricardo, The Principles of Political Economy and Taxation (New York: The Macmillan Company, 1931), p. 80.

any venture. And since workers' wages are a direct function of that success or failure, the fortunes of the labor force must rise and decline parallel to the fortunes of the general economy.[1]

The Pioneers

The beginning of the twentieth century saw the development of scientific management: the real start of management as a separate discipline, art, and science. It is significant to note here that while much of the early development in management took place in Europe, particularly in England, the birth of the new century marked the beginning of American dominance in management science. The United States, having survived her growing pains--the Civil War, the opening of the West--of the eighteen hundreds, now had time to grow to maturity and emerge as a leader in the community of nations.

A new world of exploration into the unknown of management science was beckoning to those who would heed the call. Many did, but none, perhaps, were to have the impact that Frederick Winslow Taylor was to impart on the future.

Frederick W. Taylor (1856-1915)

Two books by Frederick W. Taylor are considered landmarks in defining modern management. Shop Management, published in 1906, concerned itself with management at the shop level, i.e., with small group activity. He was concerned mainly with the efficiency and morale of workers and managers involved in the actual

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[1] Ibid., pp. 99-117.

process of production, and intended to apply his thesis on the broadest possible level. Taylor[1] defined management as the art of "knowing exactly what you want men to do, and then seeing that they do it in the best and cheapest way."[2] He goes on to say that his principal object was to advocate high wages and low labor costs, this being in the best interest of both management and workers.

Taylor had experienced management from both ends of the spectrum. As a steel-worker he was one of the managed, later to become manager of many of his former peers. It must be assumed that it was with a great deal of thought and introspection that he listed the attributes of a good manager as those which go to make up a well rounded man:

> Brains
> Education
> Special and technical knowledge; manual dexterity and strength
> Tact
> Energy
> Grit
> Honesty
> Judgment or common sense and
> Good health[3]

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[1]Frederick Taylor started his working days as a laborer for Midvale Steel Company. Soon becoming interested in the haphazard and second-rate management techniques under which he worked, he decided to do what he could to improve that situation. Attending Stevens Institute on a part-time basis, he earned an engineering degree. Almost simultaneously Taylor rose to the position of plant general manager, attaining that position at the age of twenty-eight. Thereafter he combined his knowledge of engineering with his interest in management to develop the scientific principles of shop management with which he revolutionized the management of laborers.

[2]Frederick W. Taylor, Shop Management (New York: Harper and Brothers Publishers, 1947), p. 21.

[3]Ibid., p. 96.

What more could one want of one's bosses? The worker, of course, is expected to do his share by striving to develop the same qualities of character, and by "being called upon to turn out the maximum amount of work which a first-rate man of his class can do."[1] Here, along with Taylor's views on wages, is the foundation of the "fair day's work for a fair day's pay" philosophy which has been popular with both management and labor ever since. It has indeed become one of the keystones of the entire American free enterprise system.

Taylor's second book, The Principles of Scientific Management, published in 1911, was to earn him the title of "father of modern management."[2] By now an engineer and a man of science, Taylor now defined management as "a true science, resting upon clearly defined laws, rules, and principles as a foundation."[3] Principles was a culmination of several years' experience as both a worker and a manager, an experience which allowed him to see the problems, and the over-all condition of management as it existed at that time.

Out of Taylor's observations emerged what was to become his philosophy for boss-worker relationships: work can be done better and more economically through a division of the responsibility and

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[1] Ibid., p. 29.

[2] Harold Koontz and Cyril O'Donnell, Principles of Management (New York: McGraw-Hill Book Company, 1968), p. 20.

[3] Frederick W. Taylor, The Principles of Scientific Management (New York: Harper and Brothers Publishers, 1947), p. 7.

the work between the management and the worker."[1] Management has an obligation to the workers just as the workers have obligations to management and to the job.

Taylor concluded his treatise with an expression of belief in the value of wide-spread and general adoption of scientific management techniques. He says that this

> . . . would readily in the future double the productivity of the average man engaged in industrial work. Think of what this means to the whole country. Think of the increase, both in the necessities and luxuries of life, which becomes available for the whole country, of the possibility of shortening the hours of labor when this is desirable, and of the increased opportunities for education, culture, and recreation which this implies. But while the whole world would profit by this increase in production, the manufacturer and the workman will be far more interested in the especial local gain that comes to them and to the people immediately around them. Scientific management will mean, for the employers and the workmen who adopt--and particularly for those who adopt it first--the elimination of almost all causes for dispute and disagreement between them.[2]

Certainly Taylor himself had no idea of the tremendous impact his ideas would have. Like most major innovations before or since, one can only assess their value in retrospect. And, in view of the rapidly changing world of the American economy of 1970, the impact is still being felt. Taylor was a visionary and a prophet; he foresaw the trend of things to come. In his day he was somewhat of a radical, and considered avant-garde. Sometimes he was ignored. But, aided by the surge of the twentieth century developments and by the support of other writers, the world soon became well aware of scientific management.

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[1] Ibid., p. 38. [2] Ibid., p. 142.

Initially publishing almost simultaneously with Taylor, Frank and Lillian Moller Gilbreth were a successful husband-wife team of management pioneers. The numerous writings of the Gilbreths are based on practical applications of scientific management principles. Many had only limited application and are now outmoded.[1]

The Gilbreths' most respected efforts lay in the area of motion study. One recently published management historian credits them "with laying the entire foundation for our modern applications of job simplification, meaningful work standards, and incentive wage plans."[2]

Frank Gilbreth first became interested in the work-motion relationships of various forms of manual jobs while working as a bricklayer. Observing that much of what was going on consisted of wasted motions and wasted energy, he concluded that if he could develop steps for saving motion and energy he would in fact be saving money. From these observations, carefully taken over a lengthy period and by observing many workmen in similar situations, Gilbreth concluded his rather simplistic, down-to-earth, and easily understandable rules for success:

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[1]Books like Field System, published in 1908, and Concrete System, 1908, are step-by-step analyses of how scientific methods can help specific industries. They are now out of print and generally unavailable.

[2]Claude S. George, Jr., The History of Management Thought (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1968), p. 97.

> To be pre-eminently successful: (a) a mechanic must know his trade; (b) he must be quick motioned; and (c) he must use the fewest possible motions to accomplish the desired result.[1]

It would indeed be difficult to put these ideas into simpler language, yet it seems incredible that a mere sixty years ago these formulae, although well known and documented, had not been applied on a universal basis!

From his bricklaying experiments Gilbreth went on to apply similar techniques to other industry, in the process drawing up elaborate charts[2] showing the steps to most efficient job completion in each case. He had by now married Lillian Moller who had been educated in psychology. Together the two embarked on a search for labor-saving, time-saving, thus money-making, work methods.

A list of Gilbreth-invented or -developed ideas would be astounding. Applying their interest in work, in management, and in man as a worker, to all walks of life, they experimented widely with time and trouble saving devices. They were interested not only in improving work, but in improving the totality of man and his environment. This, in the final analysis, is their great contribution to the art--or was it by now established as a science?--

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[1]Frank B. Gilbreth, "Bricklaying System," in The Writings of the Gilbreths, ed. by William R. Spriegel and Clark E. Myers (Homewood, Ill.: Richard D. Irwin, Inc., 1953), p. 55.

[2]Familiar to any reader will be the terms "process chart" and "flow diagram," two Gilbreth inventions in wide use today.

of management. Frank Gilbreth showed, through his time-study and motion-study experiments, that there is always "a better way."[1]

Henry L. Gantt (1861-1919)

A protegé and co-worker of Frederick Taylor, Henry Gantt was less of an innovator in management concepts than he was a "refiner" of ideas proposed by Taylor. Through a fourteen-year working association the two had become fast friends and greatly respected each other's ideas, eventually "falling out," however, over differences of opinion.

Gantt's major contribution is his humanistic interpretation of man as a worker. He thoroughly understood the relationship of work and the worker's concepts of his work when he said:

> We all know that when a man becomes interested in work, it frequently becomes the source not only of his livelihood but of his amusement as well. The first step, then, in attempting to establish habits of industry is to help the workman get interested in his work. If this can be done, the formation of the proper habits with regard to it follows as a matter of course. The most effective method of stimulating interest in people in general is to set a task, an objective.[2]

To Gantt it was the man, and not the job, that seemed most important. While not a social scientist in the sense of the later behavioral science school of management, he may well have been

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[1]As a somewhat fascinating aside, it is interesting to note that in spite of their management, study, and consulting work the Gilbreths "managed" to have a family of twelve! Two of their children gained a measure of fame in 1949 with the publication of the best-selling Cheaper by the Dozen, an account of Gilbreth family life in suburban New Jersey.

[2]Henry L. Gantt, "Industrial Leadership," in Gantt on Management, ed. by Alex W. Rathe (New York: American Management Association, 1961), p. 45.

instrumental in that movement's development, as he realized that the human element was the most important.

Henry Gantt's most famous contribution is the Gantt Chart, a straight-line graph to portray the measure of any activity in relation to time. This device is used widely today by management, a common application being one which compares actual to planned performance, as is a budget. The earliest applications showing the value of time-accomplishment charting occurred during World War I. Both the Ordnance Department and the Navy Department realized significant savings in the time lost between orders and delivery, and their implementation of weapons and ammunition.[1]

Harrington Emerson (1853-1931)

A lesser known disciple of the Taylor system, Harrington Emerson must be noted for his concept of "efficiency engineering,"[2] his plan to reduce waste in industry, and thus to make the advent of scientific management a distinct possibility. In addition he updated Taylor's principles to bring them into context with the realities of industry. Although they seem commonplace to the reader today, they were, when published in 1913, worth of notice.

Emerson's principles are worth repeating here:

1. Clearly defined ideal--know what you are attempting to accomplish.
2. Common sense.
3. Competent counsel--seek advice from competent individuals.
4. Discipline--adhere to rules, be obedient.

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[1] Ibid., pp. 141-144.

[2] George, op. cit., p. 103.

5. Fair deal.
6. Reliable, immediate, adequate, and permanent records--to have facts upon which to base decisions.
7. Dispatching--have each small function serve to unify the whole in order to reach objectives.
8. Standards and schedules.
9. Standardization of environmental conditions.
10. Standardization of operations.
11. Written instructions--reduce practice to writing.
12. Efficiency reward--for successful execution of a given task.[1]

Henri Fayol (1841-1925)

Evolving as a European parallel to Frederick Taylor, France's Henri Fayol published much similar management philosophy in his Administration industrielle et générale in 1916. Having worked as an engineer and a mine administrator since 1860, he had built one of the most respected and distinguished management careers of his time. During the course of this time Fayol is credited with "saving" at least one mining company from certain financial ruin and bankruptcy.[2] Thus it was Fayol's long and very personal experience as a successful manager which led him to develop his management philosophy.

Fayol concerned himself with three aspects of management:

1. He felt that management as a body of knowledge and as a science is equally applicable to all forms of group activity--business, industry, the church, the military, social organizations, etc.

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[1] Ibid., p. 104.

[2] Lyndall Urwick, The Golden Book of Management (London: Newman Neame, Ltd., 1956), p. 21.

2. He devised a complete theory of management which he felt could--if need be, and if an organization felt ready for it--be applied equally to all human endeavors.

3. He felt that management should be taught as a university discipline in order to systematically train a professional corps of managers.[1]

It is the second point, the universally applicable management system, that deserves particular notice.

In order to present his theories in such a manner as to make them acceptable to practice as well as to the college curriculum he listed his "necessary elements" to permit management to "look ahead" in order to plan wisely. And while this was first intended for the business world, Fayol's question--he later answered it--was why this could not be applied equally well almost everywhere. The elements are:

1. Planning--a systematic way to approach the future;
2. Organization--the human and material requirement for the task;
3. Command--to get optimum return on investment of human and material resources;
4. Co-ordination--to unify and harmonize all activity toward achieving one's goals; and
5. Control--to insure that plans and command are rigidly and uniformly conformed to.[2]

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[1]Henri Fayol, General and Industrial Management (New York: Pitman Publishing Corporation, 1949), Chapters I-III. The 1949 Pitman edition, published simultaneously in New York and London, is the only available English language edition of Fayol's works. The one previous attempt to translate this important book resulted in no more than a few hundred privately printed copies which were distributed in Great Britain and gained no notice in America. Management study being only one of Fayol's interests, however, his coal formation and metallurgy studies meanwhile won him a Nobel prize in 1921, as well as great personal fortune.

[2]Ibid., Chapter IV.

It is these five elements, which with some additions or modifications are today universally known and understood as the elements of management, that gave substance to Fayol's system. Universality was built in. Despite American supremacy in management, Fayol was to remain Europe's principal spokesman, practitioner, and philosopher of management science during the early part of this century.

The Social Scientists

Hard on the heels of the developments of the scientific management era came the work of the social scientists. These were the students of management who, like the scientific managers, were interested in how rank-and-file workers are stimulated, motivated, and interested in their work, but who approached this area of study with a view toward the human stimulus. The social scientist is defined by Bernard Berelson, himself one of the most distinguished, as "one who studies the institutions of man, and, not finding anything quite like the unanimity found in the natural sciences, relies on what are reasonably satisfactory explanations for assumed facts."[1] Being concerned with man, a most unpredictable subject at best, the social scientist must rely on observations of behavior which point the way to a best, or most logical, explanation. Consequently, the social scientists' study of management has become

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[1]Bernard Berelson and Gary A. Steiner, Human Behavior (New York: Harcourt, Brace and World, Inc., 1964), p. 9.

known as the "behavioral" school,[1] or the "human relations" school.[2] This school has stated the assumption that problems in management are not a function of the nature of things, but, rather, are critical to the subject and make-up of people. It is in this light that the work of two of the significant early behaviorists will be examined.

Elton Mayo (1880-1949)

Although the subject had been touched upon by writers in management for many years, Elton Mayo was the first to strongly advocate behavioral explanations of the "what" and "why" of men's actions. In applying this approach to management, he dealt chiefly with human wants, motives, drives, and personal goals, all of which need to be satisfied in order to produce a "good" worker, that is, one who is happy with his work, willing to produce, and loyal.

Mayo's work in the area of motivation will be discussed in Chapter IV, particularly as related to his findings from the Hawthorne studies. However, as an important link in the chain of events leading to the state of management science today, Mayo must be credited with formulating the basis of what opened the whole

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[1]Paul Hersey and Kenneth H. Blanchard, Management of Organizational Behavior (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1969), p. 2.

[2]Ernest Dale, Readings in Management (New York: McGraw-Hill Book Company, 1964), p. 140.

gamut of psychological and sociological factors as they influence men at work.[1]

Mayo was a psychologist. He became greatly concerned with management-labor relations as they existed in his native Australia early in the twentieth century. While teaching at Queensland University he developed the first notions of what was to become the mainstream of thought of the behavioral school. He saw it thus:

> Viewed from the standpoint of social science, society is composed of individuals organized in individual groups, each group fulfilling some function of society. Taking this fact into account, psychology--the science of human nature and human consciousness--is able to make at least one general assertion as to the form a given society must take if it is to persist as a society. It must be possible for the individual as he works to see that his work is socially necessary; he must be able to see beyond his group to the society.[2]

Arriving in America to become a professor of industrial research at Harvard in 1927, Mayo brought with him his goal for probing into behavior. Consequently, he was to have great influence on the developments of the social sciences in this country. Mayo clearly predicted the emphasis toward behavioral orientation that management research and practice was to take in the future. His work has had long-lasting repercussions.

Mary Parker Follett (1868-1933)

Worthy of comment along with Mayo, Mary Parker Follett was, in her own right, a most unusual person, this quite apart from her role as a behaviorist in management. A graduate of Radcliffe

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[1]Elton Mayo, The Human Problems of an Industrial Civilization (Cambridge, Mass.: Harvard University, 1946).

[2]Dale, op. cit., p. 141.

College (Harvard's "Annexe"), Miss Follett was instrumental in developing the concept of the community center. It was her hope that by providing school facilities in Boston to after-hours social, cultural, and educational activities, a better community could be built. In 1900 she was named to the Boston "Committee on the Extended Use of School Buildings."

After her Boston school experience, Mary Follett's interests centered on the possibilities of vocational guidance, causing her to found the Massachusetts Vocational Guidance Bureau, designed to assist those in search of jobs. It was to be a forerunner to similar bureaus now in existence in all states.

Although a social worker because of her identification with the needs of the larger community, Miss Follett applied many of the illustrations in her writings to business situations. Her Creative Experience, published in 1924, particularly attracted the world of business leaders who saw in it practical applications of a social worker's approach to human problems and difficulties. She almost instantly saw herself becoming a consultant as she was called upon to render personal assistance to specific management problems.

Mary Parker Follett saw the need for further refinements in the fine art of leadership and management of workers. She prophesied a future world where management would give ever increasing emphasis to the human factors.[1]

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[1]Specific factual reference in the section on Miss Follett can be found in Henry C. Metcalf and L. Urwick, eds., Dynamic Administration: The Collected Papers of Mary Parker Follett (New York: Harper & Brothers Publishers, n.d.).

Summary

Modern management was born in the philosophies of the English classical economists. Slow to develop in Europe, it was not until the beginning of the twentieth century that any significant progress was made. It is significant to note that the five "pioneers" of scientific management mentioned were all Americans, save one, Henri Fayol.

It was Taylor who started the rush toward scientific management in an America ready for innovation and advancements. This in turn was followed by the human activity behaviorist school which set the climate for present conditions. It is in this present day climate that motivation as an important factor of managing men at work is being considered increasingly important. Management knows that good workers need good leadership to be well motivated. Historical developments have shown that workers expect more than merely a job. On top of this, as the present day worker is seen in relation to the knowledge and communications explosions, even greater emphasis on motivation seems indicated. Peter Drucker says that as an economy has shifted from manual to "knowledge" work good management has become critical. "What the knowledge worker needs to be positively motivated is achievement." And it is up to management to set the climate that makes achievement possible.[1] The management pioneers and the behavioral scientists have shown management ways to reach maximum worker motivation in their organizations.

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[1]Peter F. Drucker, The Age of Discontinuity (New York: Harper & Row, Publishers, 1969), p. 288.

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CHAPTER III

MANAGEMENT AND THE BEHAVIORAL SCIENCES TODAY

Today's manager lives in a world of dynamic and ever-present change. Since the end of the Second World War management has truly grown to achieve the sense of maturity and permanence which it had lacked earlier. Although the importance of management techniques and management science was appreciated by students and by a limited number of practitioners, it was not until the impact of the "post-war boom" was widely felt that management became an important and necessary, perhaps even vital, addition to the other skills of the businessman. For the first time management, per se, was assumed to be vital to corporate success, not merely as a way to get the job accomplished, but rather as a scientific method of getting the job done through the wisest and most profitable use of people and other resources.

The fifties and the sixties saw many improvements, or, more specifically, refinements, in the "art" and "science" of management. The proliferation of recorded experience and knowledge, together with the growth of communications, made the interchange of ideas and the resulting expansion of horizons an immediate reality. Management techniques were broadened not only

in the area of human relations, but also in the newer and less explored studies of the quantitative skills.

The New Technology

The advent of the "computer age" in 1951[1] presented a whole new dimension to man, which was, and will continue, to make its presence felt in every aspect of American life. Writing in the New York Times in 1961, Arthur J. Goldberg, then the Secretary of Labor in the Kennedy Administration, said that with respect to the working man in America, and to the degree that his life would be changed by the computer and by automation in general, this era should properly be called "a second Industrial Revolution."[2] Goldberg no doubt was right, as few events in the last few hundred years of man will in the light of history have been as significant.

Ten or fifteen years ago computers were still considered somewhat of a "fad" by American industry, and in Europe everyone was convinced that they were at best a "passing fancy."[3] By 1960, however, it was suggested that, because of the possibility of

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[1]Although, according to historians, the age of "computing" started with the invention of the Abacus in ancient China, 1951 marks the start of the automatic computer. UNIVAC-I was the first large scale general purpose computer available to industry and government. See Ned Chapin, Automatic Computers (Princeton, N.J.: D. Van Nostrand Company, Inc., 1963), pp. 182-183, for a chart showing historic developments in computer technology.

[2]Arthur J. Goldberg, "The Challenge of 'Industrial Revolution II,'" New York Times Magazine, April 2, 1961, p. 32.

[3]T. W. McRae, in The Impact of Computers on Accounting (New York: John Wiley & Sons, Inc., 1964), says that because of European, and especially British, negativism the task of developing the computer industry was handed to Americans almost as if by forfeit, this in spite of such significant earlier British developments as EDSAC (1949), the first practical storage-program computer.

potential total automation, "eventually the physical and social sciences may become integrated into a single discipline."[1] The significance of that statement to the manager of today--and more so to the manager of tomorrow--is awesome in its implications. Managers will have to master increased technological capabilities along with growing social responsibilities.

A final word on the continually increasing responsibility that management faces in the wake of mind-staggering technology is pronounced by Harold J. Leavitt in discussing the changes which managers will have to undergo in order to be able to continue to satisfy the demands of the job and the motives and desires of their workers:

> Perhaps the biggest step managers need to take is an internal, psychological one. In view of the fact that information technology will challenge many long-established practices and doctrines, we will need to rethink some of the attitudes and values which we have taken for granted. In particular, we may have to reappraise our traditional notions about the worth of the individual as opposed to the organization. This kind of inquiry may be painfully difficult, but will be increasingly necessary.[2]

Thinking like Leavitt's represents an up-dating of Taylorism, and indicates the managerial evolution brought about by changing times. It also suggests that management as a profession is well equipped for the present and future challenges of the computer age.

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[1]Paul M. Dauten, Jr., Current Issues and Emerging Concepts in Management (Boston: Houghton Mifflin Company, 1962), p. 292.

[2]Harold J. Leavitt and Thomas L. Whisler, "Management in the 1980's," in Management Systems, ed. by Peter P. Schoderbek (New York: John Wiley & Sons, Inc., 1967), p. 86.

The Behavioral Sciences

Out of the pioneering efforts of men and women like Taylor, Follett, and the Gilbreths, emerged the modern concepts of the behavioral school. Emerging from the shattering experiences of history's most devastating war, the behaviorists turned their attention directly toward the human factors of management. The degree with which the emphasis on human skills has been incorporated in managerial philosophy is reflected in findings of the American Management Association. According to the AMA, two hundred representative managers agreed that the most important single trait of an executive is his ability to get along with people. In an AMA-conducted survey, management rated this ability more vital than intelligence, decisiveness, knowledge, or technical job skills.[1]

Since human skill involves working with and through other people, the behaviorists turned toward the search for greater and more complete understanding of ways to gauge, predict, and measure why people do what they do. They sought to increase human effectiveness through this understanding, and to direct, change, and control behavior, and the motivation environment determining that behavior.

Because of the continual expansion of behaviorist theory and philosophy, the list of writers offering major and significant contributions is virtually inexhaustible. This paper can in no way give credit to all deserving contributors. Also, again because

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[1]Hersey and Blanchard, op. cit., p. 7.

of the knowledge explosion, new contributors can be added almost as soon as one were to complete a list.[1] Several contributors to the field, however, must be considered of major importance.

F. J. Roethlisberger (1898-)

Roethlisberger is perhaps best known for his definitive report on the Hawthorne Studies. Co-authored with W. J. Dickson, Management and the Worker presents a detailed analysis of the now famous studies conducted by Elton Mayo.

The Hawthorne experiment was a new and daring approach to the study of worker satisfiers and dissatisfiers. Fritz Roethlisberger, a young man of twenty-nine when the study began in 1927, must be credited with producing an equally revolutionary report, one that has evolved as a classic in management literature.

Out of the systematic and detailed study of the results of Hawthorne which Roethlisberger had to compile to give direction to his book, he determined that, according to his best estimate, management has two principal functions: (1) securing the common economic purpose of the total enterprise (this is the reason for being in business), and (2) maintaining the social organization so that individuals through contributing their services to this common purpose obtain personal satisfaction that makes them willing to co-operate (this is the mainspring for motivating workers).[2]

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[1]For the purpose of identifying principal management science contributors with major developments, see Appendix B.

[2]F. J. Roethlisberger and William J. Dickson, Management and the Worker (Cambridge, Mass.: Harvard University Press, 1949), p. 569.

Management and the Worker thus became one of the earliest compilations of motivation study results which, with minor variation, could be made applicable to any type of organization or group today.

In 1941 Professor Roethlisberger published Management and Morale, wherein he presented his point of view of the problems of human collaboration in the context of the modern industrial scene. Roethlisberger identifies his pre-occupation with the human aspect of management-employee relations when he says that:

> . . . it is my simple thesis that a human problem requires a human solution. First, we have to recognize a human problem when we see one; and, second, upon recognizing it, we have to learn to deal with it as such and not as if it were something else. Too often at the verbal level we talk glibly about the importance of the human factor; and too seldom at the concrete level of behavior do we recognize a human problem for what it is and deal with it as such.[1]

Nothing could more succinctly sum up the purpose to which Roethlisberger has devoted his life: to know and to understand the problems of people, and then to apply that understanding toward alleviating the problems.

Douglas Murray McGregor (1906-1964)

A social psychologist, McGregor believed that man's motivation and behavior are directly related to his needs. This closely supports the Maslow theory described in Chapter IV. In light of this belief he felt that the usual practice of management went against basic human nature.

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[1]F. J. Roethlisberger, Management and Morale (Cambridge, Mass.: Harvard University Press, 1941), p. 9.

Dr. McGregor's major contribution is his The Human Side of Enterprise, published in 1960. In it he delineated his now famous concepts of human behavior known as Theory X and Theory Y. The principal assumptions about the nature of man are summarized in Table 1, and are explained as follows:

Theory X

1. The average human being has an inherent dislike of work and will avoid it if he can--deep rooted and historical, this belief has been the underlying driving force of management.

2. Because of this human characteristic of dislike of work, most people must be forced, coerced, controlled, directed, and threatened with punishment to get them to put forth adequate effort toward the achievement of organizational objectives. The dislike for work is so strong that nothing will be enough to overcome it. Only the constant threat of punishment will cause people to work.

3. The average human being prefers to be directed, wishes to avoid responsibility, has relatively little ambition, wants security above all--a "mediocrity of the masses" is implied, likening men to herds of sheep.[1]

It is obvious that McGregor is convinced that Theory X does in fact rule management. "A great many managers will support this assumption, and it is easy to see it reflected in policy and practice . . . . It (Theory X) is in fact a theory which materially influences managerial strategy in a wide sector of American

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[1]Douglas McGregor, The Human Side of Enterprise (New York: McGraw-Hill Book Company, Inc., 1960), p. 33.

industry today."[1] At the same time he is sure that the implied assumptions about man are incorrect and would defeat any existing forces of motivation. "The growth of knowledge in the social sciences has made it possible to reformulate some assumptions about human nature and human behavior."[2] This he does, as expressed in his Theory Y.

TABLE 1

LIST OF ASSUMPTIONS ABOUT THE NATURE OF MAN ACCORDING TO McGREGOR'S THEORY X AND THEORY Y (as compiled by Paul Hersey and Kenneth H. Blanchard, Management of Organizational Behavior)

Theory X	Theory Y
1. Work is inherently distasteful to most people.	1. Work is as natural as play, if the conditions are favorable.
2. Most people are not ambitious, have little desire for responsibility, and prefer to be directed.	2. Self-control is often indispensable in achieving organizational goals.
3. Most people have little capacity for creativity in solving organizational problems.	3. The capacity for creativity in solving organizational problems is widely distributed in the population.
4. Motivation occurs only at the physiological and security levels.	4. Motivation occurs at the affiliation, esteem, and self-actualization levels, as well as physiological and security levels.
5. Most people must be closely controlled and often coerced to achieve organizational objectives.	5. People can be self-directed and creative at work if properly motivated.

[1] McGregor, Human Side, op. cit., p. 35.

[2] Ibid.

Theory Y

1. The expenditure of physical and mental effort in work is as natural as play or rest. The average human being does not dislike work, and may look at work as a source of enjoyment or as a source of punishment.

2. External control and the threat of punishment are not the only means for bringing about effort toward organizational objectives. Man will exercise self-direction and self-control in the service of objectives to which he is committed.

3. Commitment to objectives is a function of the rewards associated with their achievement. Self-actualization can thus directly contribute toward the realization of organizational objectives.

4. The average human being learns, under proper conditions, not only to accept but to seek responsibility. Avoidance of responsibility, and lack of ambition, are not inherent human characteristics.

5. The capacity to exercise a relatively high degree of imagination, ingenuity, and creativity in the solution of problems is widely distributed among the population. It is a human trait to adapt and to adjust.

6. Under the conditions of modern industrial life, the intellectual potentialities of the average human being are only partially utilized. Most people are never asked to measure up to their abilities.[1]

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[1] Ibid., p. 45.

McGregor developed Theory Y in the hope that the management profession would be persuaded to adopt greater humanistic views in the interpretation of man's nature. He felt that man can be basically self-directed and creative at all times, including in his work, if he is property motivated. It must be, therefore, an essential task of management to help workers find that potential. A properly motivated worker can achieve his own goals best, according to McGregor, if he directs his effort toward accomplishing organizational goals.

Douglas McGregor's other major book is The Professional Manager. Published in 1967, three years after his death, this volume was completed and edited by Warren Bennis, his life-long friend, and Caroline McGregor, his widow.

In his newer book McGregor addressed himself to his concern with the various means by which the individual can grow and realize his basic goals while at the same time furthering the goals of the organization. He emphasized again the need to incorporate the knowledge of the behavioral sciences into management philosophy. He said that

> Our present knowledge indicates that there are a number of important characteristics of individuals and of the work environment which conventional management practice does not take into account. The variables that most managers do recognize are necessary, but they are not sufficient to explain organized human effort. Behavioral science affords the possibility of improving organized human effort by identifying additional variables and their inter-relationships so that, once recognized, they may be taken into account in managerial practice.[1]

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[1]Douglas McGregor, The Professional Manager (New York: McGraw-Hill Book Company, 1967), p. 6.

Thanks to the efforts of McGregor, management is keenly aware of behavioral implications. The words Theory X and Theory Y constitute the common vernacular of managers who with some measure of understanding are applying the philosophy.

Rensis Likert (1903-)

Dr. Rensis Likert is a leading contemporary behavioralist. As director of the pretigious Institute for Social Research at the University of Michigan, his concepts bridge the gap from the assumptions about the individual as expressed in Theory Y (McGregor), to the views of the organizational whole (Argyris) as a motivator of human behavior.

In New Patterns of Management Likert discussed a management systems approach to leadership in organizations.[1] He assumes that all management fits into one of the following styles:

System 1 --Management has no confidence or trust in subordinates.

System 2 --Management has a condescending attitude toward subordinates.

System 3 --Management has substantial but not complete trust. There is a moderate amount of superior-subordinate interaction, and a fair amount of confidence and trust. A "reasonably well-motivated" worker results from such a system.

System 4 --Management has complete confidence and trust in

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[1] "Systems" has become a method of approaching all manner of problems in modern management. Management control and measurement systems are very much a part of the modern business world.

subordinates. Workers consequently are motivated by participation and involvement in developing economic rewards, setting goals, improving methods, and appraising progress toward goals.[1]

It can be seen that a continuum from System 1 through System 4 includes the extremes of Theory X and Theory Y. Accordingly, the leadership practised by a manager in System 4 should be the most successful. Likert feels that his conclusions on leadership in organizations show the great importance of the quality of leadership, and that

> . . . supervision and the style of leadership throughout the organization are usually much more important in influencing results than such general factors as attitudes toward the company or interest in the job itself.[2]

Another contribution of Likert's which has proven of value in motivation theory is his concept of the linking pin.[3] Here, as shown in Figure 1, a person who is a member of two groups "links" together the ideas, the thinking, and the motivation of the two groups. As a person in the role of linking pin usually has very little priority in one group, while exerting leadership in the other, he becomes an important up- and downward influence. His personal motivation is crucial.

Likert concludes his study by asserting that most important to personal and to group survival is the establishment and maintenance of friendly supportive relationships. "Either we

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[1]Rensis Likert, New Patterns of Management (New York: McGraw-Hill Book Company, Inc., 1961), Chapter 2.

[2]Ibid., p. 23.

[3]Ibid., p. 113.

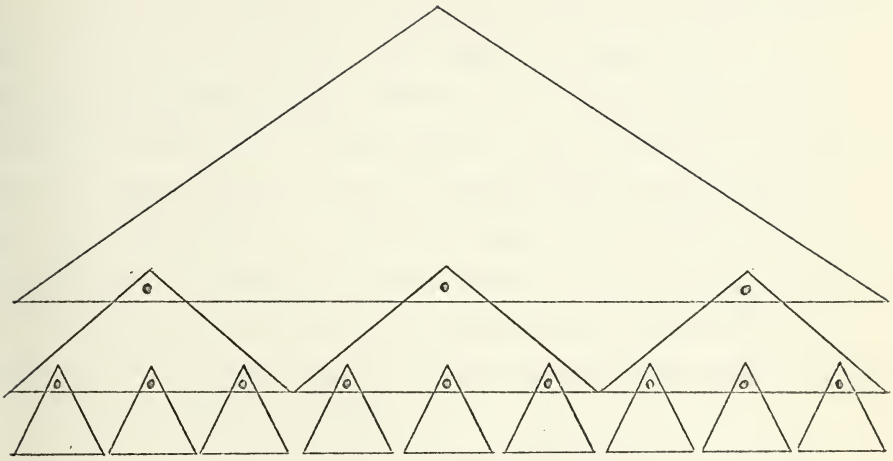

Fig. 1.--The Linking Pin
(• = member linking two groups)

establish them or we crack up,"[1] is his matter-of-fact way of putting it. A strong way of making a positive point!

Chris Argyris (1923-)

Argyris has concerned himself primarily with the role of an individual as a member of a group, and organizations and society in the larger sense. As a relatively young man he is truly modern in his research approach, and has incorporated the findings of his predecessors into his philosophy. The conflict between the individual in his drive for self-actualization and the needs of the group or the organization is predominant in his writings.

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[1]Rensis Likert, "Motivation: The Core of Management," in Management and the Behavioral Sciences, ed. by Maneck S. Wadia (Boston: Allyn and Bacon, Inc., 1968), p. 224.

With some ten books addressing the nature of organizational behavior Argyris is probably "the expert" in that field. Personality and Organization presents as its basic objective an attempt to explain some "basic causes, i.e., the why, of human behavior in human organizations."[1] Argyris says that in order to make that understanding a reality men must first realize that "it is impossible to understand others unless we understand ourselves."[2] The book continues to explore the combination of factors of individual, small informal group, and formal organization behavior that dictates all of human behavior.[3]

In his Understanding Organizational Behavior, Argyris further explores the impact that organizations have on the individual. Here he finds that organizational behavior demands a largely negative orientation as it does not meet individuals' expectations or demand a full measure of creativity or motivation for self-actualization.[4]

Argyris found that:

1. There is a lack of congruency between the needs of (mentally) healthy individuals and the demands of the organization.

2. The results of this disturbance are frustration, failure, short-term perspective, and conflict.

3. Under certain conditions the degree of frustration, failure,

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[1]Chris Argyris, Personality and Organization (New York: Harper & Row, Publishers, 1947), p. 2.

[2]Ibid., p. 6. [3]Ibid., pp. 22-75.

[4]See pages 62-68 for an explanation of the hierarchy of human needs.

short-term perspective, and conflict will tend to increase, this if the conditions originally causing the problem worsen.

4. The nature of organizations will cause subordinates to experience competition, rivalry, and hostility. This again because of the potential denial of individual achievement or realization.

5. Employees react to formal organizations by creating informal activities, or creating adaptive behavior.

6. Certain management reactions tend to increase the antagonisms underlying the adaptive behavior. These actions tend to:

a) Increase the degree of directive leadership.

b) Increase the degree of management controls.

c) Increase the number of pseudohuman relations programs.

The last listed item increases distance between employee and management as workers do not feel them relevant.[1]

The above finding indicates Argyris' dissatisfaction with the way that organizations control individuals, often without the latter's consent, or, more astonishingly, his full awareness. Argyris clearly feels that this is an unsatisfactory condition of man and devotes himself to bringing about the sort of understanding of self and of others that will overcome the dilemma.

Argyris expresses inconclusiveness in his findings, in that human organizations defy complete definition and understanding. By outlining the potential dissatisfiers he has done much, however, to point the way toward the organizational understanding he strives to

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[1]Chris Argyris, Understanding Organizational Behavior (Homewood, Ill.: The Dorsey Press, Inc., 1960), p. 18.

find. And as man must operate in an organization (or group) of some sort, this understanding is of great importance when applied to the motivation to work.

Frederick Herzberg (1923-)

Frederick Herzberg is one of the younger human behavior innovators, yet his impact is of no insignificant proportion. A keen student of both McGregor and Argyris, he is convinced that knowledge about man, his needs and his motives, are of great value to both the individual and the organization.

> To industry, the payoff for a study of job attitudes would be increased productivity, decreased absenteeism, and smoother working relations. To the individual, an understanding of the forces that lead to improved morale would bring greater happiness and greater self-realization.[1]

Herzberg has studied job attitudes to determine what assumption about human behavior could be made. His motivation-hygiene theory resulted from his analyses. He learned that man has two different categories of needs which are essentially independent of each other and affect behavior in different ways. He found that when people felt dissatisfied with their jobs, they were concerned about the environment in which they were working. But, if people felt good about their jobs, it related to the work itself. Herzberg called the first category of needs the hygiene factors (see Table 2), equating them to personal hygiene as being a function

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[1]Herzberg, "Motivation," op. cit., p. 306.

of the environment. The second group he called motivators, since they influence people in their daily performance.[1]

TABLE 2

MOTIVATION AND HYGIENE

HYGIENE FACTORS (Environment)	MOTIVATORS (Work)
Policies & Administration	Achievement
Supervision	Recognition
Working Conditions	Accomplishment
Interpersonal Relations	Challenge
Money	Increased Responsibility
Status	Growth
Security	Development

Frederick Herzberg's Work and the Nature of Man is a comprehensive report on research he has conducted as related to his hygiene theory in major industrial organization. It is his attempt "to define man's total needs."[2] He does so in a most thought-provoking manner.

Other Writers

Several of the writers listed in Appendix B merit brief mention in addition to the five discussed above.

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[1]Frederick Herzberg, Work and the Nature of Man (Cleveland: The World Publishing Company, 1966), pp. 71-91.

[2]Ibid., p. x.

Lyndall F. Urwick

Urwick is considered a "universalist" in his approach to management, strongly supporting the principles of unity of command, span of control, and management by exception. He tends to apply the scientific method, employing elements of the philosophies of men like Taylor and Fayol, minimizing, however, most of the human value understanding of those classicists.

Lyndall Urwick feels that men are shaped by organizations, and that strict adherence to organization, per se, maximizes human effectiveness. He seems to be diametrically opposed to the thinking of behaviorists like Argyris and McGregor when he says that

> . . . an organizer can and should sit down in a cold-blooded, detached spirit and draw an ideal structure, an optimum distribution of duties and relationships, and then expect an infinite variety of human nature to fit into it.[1]

While the behaviorists tend to think that the opposite is true, i.e., that the nature of man dictates the nature of organizations, they depend on the sort of clear-cut and traditional thinking as Urwick's for their base of operations. It is upon this traditional framework of organization that human behavior principles are built, and Urwick will not deny the value of a humanistic orientation to management.

> If one wishes to emphasize the word "behavior" it is, of course, arguable that ultimately it is impossible to be exact about organization without a complete and

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[1]Lyndall F. Urwick, The Elements of Administration (London: Sir Isaac Pitman & Sons, Ltd., 1947), p. 36.

> scientifically valid analysis of human greatness, folly, love, and hate.[1]

It is precisely that analysis that Urwick credits the behaviorist with.

Kurt Lewin

Lewin died in 1947. He is listed here, however, with the group that is considered the modern management school as his principal contribution, group dynamics, is very much a part of today's scene. Group dynamics implies a number of assumptions about individuals, and about the group or groups within which they operate, which point to an attempt "of breaking down barriers between the leaders and the led."[2] In short, Lewin asserts that "leadership" and "followership" in human groups are a function of the dynamics of the group as influenced by the nature of the individual, and are a matter of consent and understanding. Much like Mary Parker Follett, Lewin felt that "one person should not give orders to another person, but both should agree to take their orders from the situation."[3] In his book Resolving Social Conflicts,[4] Kurt Lewin emphasized the importance of understanding the everchanging aspects of group dynamics as the key to understanding human behavior in groups.

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[1]Lyndall F. Urwick, "Organization and Theories About the Nature of Man," Academy of Management Journal, X (March, 1967), 9.

[2]Ernest Dale, Management: Theory and Practice (New York: McGraw-Hill Book Company, 1965), p. 469.

[3]Metcalf and Urwick, op. cit., p. 60.

[4]Kurt Lewin, Resolving Social Conflicts (New York: Harper & Row, Publishers, 1948).

E. Wright Bakke

Bakke approaches the subject of organization with the viewpoint that it involves a "fusion process" of individual and group needs. The individual, he states, hopes to use the organization to achieve his self-actualizing goals, while the organization needs the individual to achieve its (economic, etc.) goals.[1] "The organization to some degree remakes the individual and the individual to some degree remakes the organization."[2]

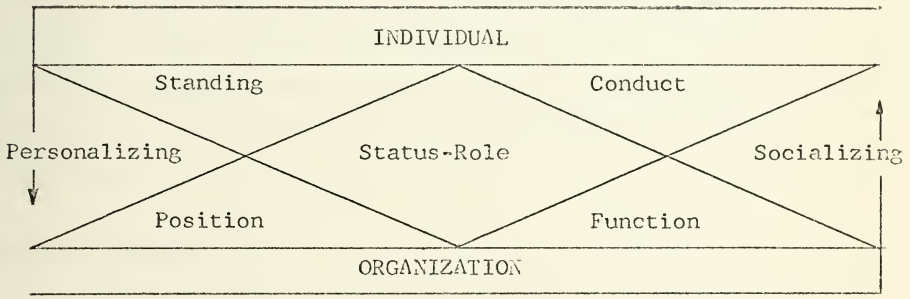

Fig. 2.--The Fusion Process

In Figure 2, Bakke demonstrates that individual and group dynamics perform a continuing inter-play which change both the individual and the group.[3] This forms the basis of the "bonds of organization" which Bakke sees as being of major importance in the functioning of an organization:

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[1]E. Wright Bakke, The Fusion Process (New Haven, Conn.: Yale University Press, 1953), p. 12.

[2]Ibid., p. 13.

[3]Ibid., p. 20.

1. Identification.
2. Workflow--assignment of responsibility.
3. Three Control Bonds consisting of
   a. Direction.
   b. Motivation.
   c. Communication.[1]

Bakke insists that through the implementation of the bonds of organization men can realize the "first important concept of organization: an integrated framework of major parts."[2] This he considers the basis of success.

Bakke's latest studies have been in application to the functions and functioning of labor unions as very significant and important organizations in the lives of workers. He found that the application of his theories has resulted in actual noteworthy progress in labor-management relations when applied to "real" situations.[3]

Peter F. Drucker

Peter Drucker may well be the only contemporary management consultant and writer to enjoy such status accolades as "best-seller." A prolific writer, respected economist, and sought-after educator, Drucker is a man on the go.

Drucker spans the gamut of management concepts ranging from

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[1]E. Wright Bakke, Bonds of Organization (Hamden, Conn.: Archon Books, 1966), p. xxxii.

[2]E. Wright Bakke, "Concept of Social Organizations," in Modern Organization Theory, ed. by Mason Haire (New York: John Wiley & Sons, Inc., 1959), p. 19.

[3]Bakke, Bonds, op. cit., pp. 179-211.

the very traditional to the most progressive. Writing about scientific management, he says:

> Altogether it may well be the most powerful as well as the most lasting contribution America has made to Western thought since the Federalist Papers. As long as industrial society endures, we shall never lose again the insight that human work can be studied systematically, can be analyzed, can be improved by work on its elementary parts.[1]

Looking at the idea of establishing a free and functional industrial society in the context of contemporary reality, however, Drucker says that in order to achieve that goal,

> . . . we have to reverse the political and social trends which have dominated the Western world ..... for the last fifty years. During this period the individual has steadily been losing function and status in society.[2]

It is toward equating the conservative and the contemporary that Drucker has addressed himself.

What is perhaps Drucker's best known contribution to management is his concept of "management by objectives." In sum, it states that "business performance requires that each job be directed toward the objectives of the whole business."[3] The objective of the firm (or the organization in varying forms) must be clearly understood and must be realistic and obtainable. And management must strive at all times to give common direction of

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[1]Peter F. Drucker, The Practice of Management (New York: Harper & Brothers Publishers, 1954), p. 280.

[2]Peter F. Drucker, The Future of Industrial Man (New York: The John Day Company, 1942), p. 275.

[3]Drucker, Practice, op. cit., p. 121.

effort, and to "establish team work and harmonize the goals of the individual with the common weal."[1]

Harold J. Leavitt

Harold Leavitt claims that even today, after the impact of the behavioral sciences has been felt as long and as strongly as it has, "most organizations still manage to get along quite nicely by telling their members exactly what to do and by preventing them from 'being themselves.'"[2] Feeling that both the traditional, or scientific, management school and the behaviorist disciples were swept up in the pitfalls of "over-generalization," Leavitt senses the need for reconciling the best of both worlds through the psychology of the manager.

Leavitt sees modern organization as being continually volatile and consisting of the phenomena of structure, technology, and people. It is the interaction of these three ingredients that cause an organization to either function smoothly or grind to a halt. Change, innovation, and improvement in any one part of the formula can have equally beneficial results in the other two. "Organizations do not stand still. If we inject something into one part of the system bells begin to ring and lights begin to go on all over, often where we hadn't expected.[3]

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[1]Ibid., p. 136.

[2]Saul W. Gellerman, Motivation and Productivity (New York: American Management Association, Inc., 1963), p. 217.

[3]Harold J. Leavitt, "The Volatile Organization," in Dale, Readings, op. cit., p. 12.

In his Managerial Psychology Harold Leavitt approaches the premise that knowledge of people and their behavior is a prerequisite to any conscious attempt to learn how to manage people. Admitting that people have needs, either natural or social, he feels that it is an understanding of these needs, together with an appropriate implementation of that understanding, that creates the sort of manager that people require. And, according to Leavitt, the manager is the most important person in the relationship.[1] Leavitt sees the "ideal" manager as one who

> . . . puts emphasis on those phases of the manager's job involving the gathering and analyzing of information, decision making, and action, with a recognition of the unprogrammed nature of his problems, his continuous dependence on other people, and the pressures imposed upon him by his position in a hierarchy.[2]

Herbert A. Simon

Herbert Simon has been called "the young debunker of traditional management theory" in that he has challenged and resisted the long-standing and accepted philosophies.

Simon's outstanding contribution is in his approach to the role of authority, which he calls "the power to make decisions which guide the actions of another."[3] In organizations, Simon says,

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[1]This idea is closely related to leadership. See Chapter IV for a discussion of the qualities of leaders, i.e., managers, that are considered important.

[2]Harold J. Leavitt, Managerial Psychology (Chicago: The University of Chicago Press, 1964), p. 311.

[3]Herbert A. Simon, Administrative Behavior (New York: The Macmillan Company, 1957), p. 125.

authority can exist only when a condition exists which involves an "expectation of obedience by one, and a willingness to obey by another."[1] This observation is succinct in understanding the function of leadership, explicit or implicit, as it exists in all groups and organizations. This is borne out by Simon's statement that: ". . . an important function of authority is to permit a decision to be made and carried out, even when agreement cannot be reached."[2]

In discussing the role and the importance of authority, Simon feels that in the context of the organizational whole, the following concepts are equally important for achieving effectiveness: 1) sound administration; 2) decision-making; 3) communication; and 4) loyalty to organization and to individual.

New Management Tools

Briefly touched upon above in the discussion on the role of computers, it is significant and important to note that management, by nature of its dynamic personality, is continually undergoing considerable change through the introduction of new methods and concepts.

Along with the traditional concepts of organization and the human value approach of the behaviorists, management today has available a host of techniques which have been developed to improve decision-making. Most of these techniques originate in the new mathematics that has been burgeoning during the last twenty or

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[1] Ibid., p. 126. [2] Ibid., p. 152.

thirty years. What once was left to chance or to the intuition of the manager can now be predicted and explained with precise and accurate mathematical models and formulae.

Quantitative methods of analysis based on statistical and mathematical probability have become commonplace. Important among these are:

Linear Programming

Linear programming is a mathematical procedure for optimizing the use of resources, given an objective and understanding certain resource limitations (constraints) as stated in the linear functions. Calculations for this technique are often quite involved and complex, but may be demonstrated in a relatively simple graphical illustration as shown in Figure 3. The value of linear programming is that it can be used to find the optimum solution to many problems management may encounter, including such personnel problems as manpower, pay, vacations, and holidays. In addition to its obvious economic value it can thus become a valuable tool for worker motivation.

Stochastic Programming

Considerably more applicable to areas of management involving human values and factors, stochastic programming bases decisions on anticipations concerning the probable values of various factors relevant to a problem. Since any outcome in a situation involving humans depends on "something to happen to make something

else possible" a number of choices or possible courses of action, together with their probable outcomes, usually present themselves.

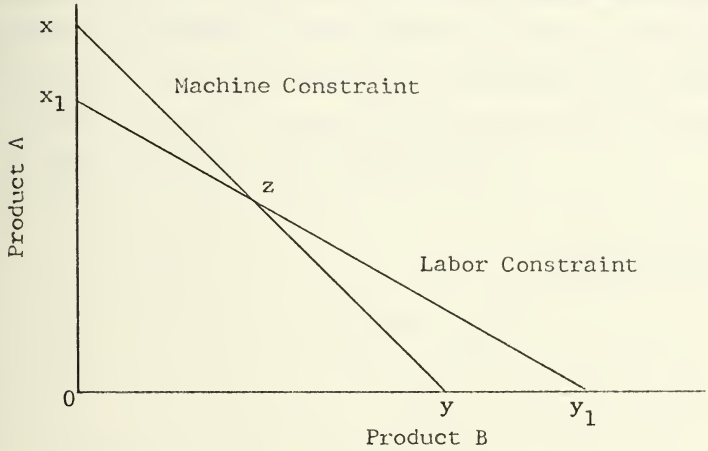

Fig. 3.--Linear Program showing constraints as related to manufacture of Products A and B

Notes:

Machines can produce either x of A or y of B or any combination of the two--this becomes one of the constraints.

Labor force makes it possible to produce either x_1 of A or y_1 of B per day, or any combination of the two--this becomes another constraint.

Assuming the objective to be a maximization of profit it can be seen that a combination of possible solutions that lies within all four points of contraint (area $0\text{-}x_1\text{-}z\text{-}y$) would satisfy the constraints and offer an optimum solution.

Source: John E. Freund, College Mathematics With Business Applications (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1969), p. 224.

The clearest example of stochastic programming is the tree diagram. As applied to a management situation, a manager must

make the right decision at each decision point in order to eventually arrive at the best possible solution.[1] As compared to the mathematical certainty of linear programming, it can be seen that this procedure relies a good deal more on management skill and expertise. As seen in Figure 4, management must weigh alternate courses A versus B, taking all possible risks, as compared to possible outcomes, into consideration.

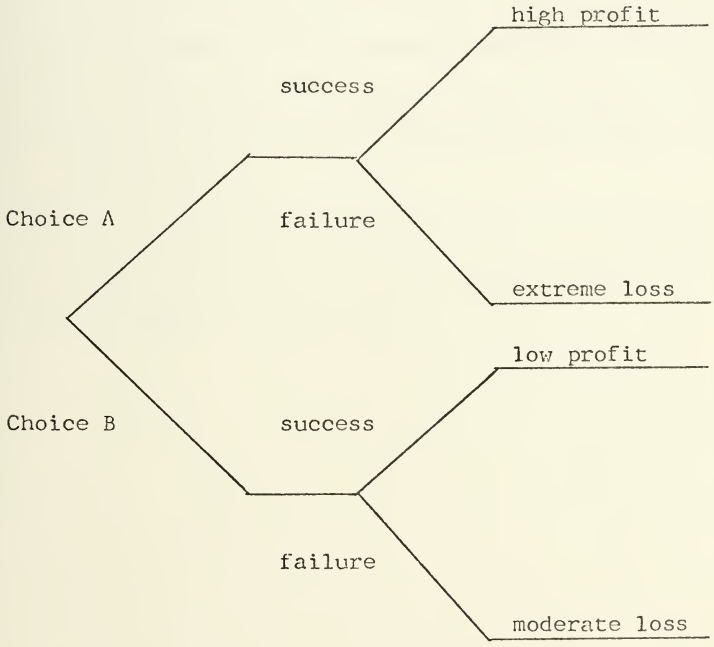

Fig. 4.--Tree Diagram

[1]Ernest Dale and L. C. Michelon, Modern Management Methods (Cleveland: The World Publishing Company, 1966), p. 158.

Contributors to Quantitive Analysis

The numbers of writers and mathematicians who have contributed to this field is growing daily. The most significant to date are included in Appendix B.

Summary

Based on the developments of the scientific management and human behavior schools, the "modern school of management" has made significant strides toward more clearly defining the role of the individual as a member of the organization and of society. The behavioral sciences have today assumed their rightful place among the sociological disciplines as interpreters of man's motives, his actions, and his needs.

The new technology, as embodied in the computer, and the new mathematical techniques which are now available to management, have further widened the horizon.

CHAPTER IV

MOTIVATION

Human Factors

Motivation to work is a function of human conditions. It is relative to one's feelings about self, about organization, and about society as a whole. And it is, of course, related to the nature of the job.

Human relations has become a catch-all term for all aspects of human interaction. Once management widely ignored, or at best treated with little interest, this area of man's life. But, thanks to the work of the "scientific management" and "human relations" schools of management, an almost universal recognition of the values of the human relations approach to workers has been developed. Underlying the recognition of this still emerging and maturing concept are the axiomatic facts that "work is done only by people, and people must be property motivated in order to perform at peak efficiency."[1] The principal objective of this body of knowledge, then, is to try to understand human behavior at work, and how this behavior, once understood, can be directed toward desirable ends.

Today, hopefully, all managers recognize the importance

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[1]Carl Heyel, ed., The Encyclopedia of Management (New York: Reinhold Publishing Corporation, 1963), p. 287.

of human relations. It is understood that an employee, be he the errand boy or the plant manager, is not merely an economic entity, a raw material, or a resource, but rather a whole person, driven by all of the influences and outside forces that shape the world. In addition to being a card in the personnel data file, the worker is a unique factor, different from all other items in the business inventory. As such, managers know that he must be motivated, not only for doing his job, but also to strive constantly to improve his performance on the job.

The Roots of Motivation Theory

While human relations is developing into a separate and distinct body of learning, its basic premises have roots in the other social science disciplines. From psychology one learns the concepts and the measuring tools for an understanding of job placement, interviewing, testing, and incentives. And motivation, of course, is interwoven throughout all of these areas. Anthropology has contributed its knowledge of man and his development, this being of prime importance among the environmental influences which sociologists have helped to explain in the study of interrelationships of groups and the resulting effects on group members. Additionally, one can find examples of how physiology and economics have aided in the development of the human behavior discipline.

Management quickly learned that concern for human relations is good business because it translates itself to job enthusiasm on

the part of employees.[1] That of course provides opportunity for profit and for a general improvement of all aspects of business conditions as motivated employees try for maximum results.

Most important here, and absolutely necessary for the implementation of any useful motivation theory, is a clear and precise understanding of the idea that management should strive to make people want to work, rather than just giving them a chance to work or compelling them to work. Human beings, being pliable, fragile, and often delicate, can, like a long rope, be more easily pulled than pushed along. It is on that premise that all motivation theory must be based. Additionally, it must be understood that whatever it is that motivates--and as we shall see there are many things--the motives are directed toward expected or "hoped for" goals. These incentives may be tangible, like pay, or intangible, like praise or the feeling of approval.

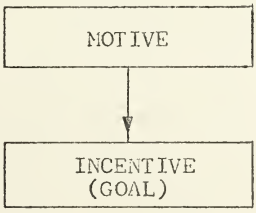

Fig. 5.--Motives are incentive directed.

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[1]Carl Heyel, How to Create Job Enthusiasm (New York: McGraw-Hill Book Company, 1942), p. 17.

Hierarchy of Needs

All workers, and all people, have a great number of needs which are answered in an equally great number of ways. Generally two types of needs are recognized:

1. Primary Needs--the basic physiological requirements of the human body, including such considerations as hunger, thirst, sleep, air to breathe, temperature, and other physical needs; and

2. Secondary needs--those derived from a person's interaction with his environment. This includes such things as competition and rivalry, self-esteem, belongingness, self-expression, self-determination, ego-enhancement, love, sense of duty, ad infinitum.[1]

It is interesting to note that, although secondary needs are "learned" needs, where primary ones are "natural," both develop in an individual beginning at the earliest stages of life.[2]

Abraham H. Maslow, in his 1954 book Motivation and Personality, proposed that the secondary needs, as listed above, are the elements of personality and give the key to understanding differences among men. He said that secondary needs are "higher" needs which evolve, once the primary needs are met, to dominate the organism. The hierarchy of need concept, as espoused by Maslow, has been universally accepted, and is a widely used basis for numerous articles, books, and other works on motivation.[3] Maslow was the first to bring order and unity to a span of thought

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[1]Massie, op. cit., pp. 108-109.

[2]Jersild, op. cit., p. 6.

[3]Wadia, op. cit., pp. 118-120.

which has become so very important. Maslow explained his purpose by saying that:

> Our classification of basic needs is in part an attempt to account for unity behind the apparent diversity among men, and from culture to culture. No claim is made that it is ultimate or universal. The claim is made, however, that it is more ultimate, more universal, more basic than the superficial conscious desires, and makes a closer approach to common human characteristics.[1]

In addition to recognizing the existence of a worker's needs, it is important to remember that there is a priority of these needs. Maslow lists them:

1. Basic physiological needs (primary),
2. Safety needs,
3. Love and belongings needs,
4. Esteem and self-respect needs,
5. Needs for self-realization and accomplishment.[2]

Graphically portrayed, the hierarchy might represent a ladder, a sort of stepping-stone approach to satisfaction and to self-fulfillment, each step being predicated on having achieved satisfaction at all previous levels.[3]

Priorities Explained

Physiological Needs

As a starting point for motivation theory in application, Maslow insists that all physiological needs must be answered. If a man does not have air to breathe, or bread to eat, it is likely

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[1] Abraham H. Maslow, Motivation and Personality (New York: Harper & Row, Publishers, Inc., 1954), p.102.

[2] Ibid., pp. 80-92.

[3] Figures 6-10, representing the hierarchy of need, are taken from Hersey and Blanchard, op. cit., Chapter 2.

that any motivators influencing him would answer his physical needs rather than any of a higher level. Once these needs are fulfilled (satisfied), however, Maslow describes how man is ready to move to the second and subsequent levels in the need hierarchy:

> The physiological needs, when gratified, cease to exist as active determinants of organizers of behavior. They now exist only in a potential fashion in the sense that they may emerge again to dominate the organism if they are thwarted. A want that is satisfied is no longer a want. Behavior is dominated only by unsatisfied needs. If hunger is satisfied it becomes unimportant in the current dynamics of an individual.[1]

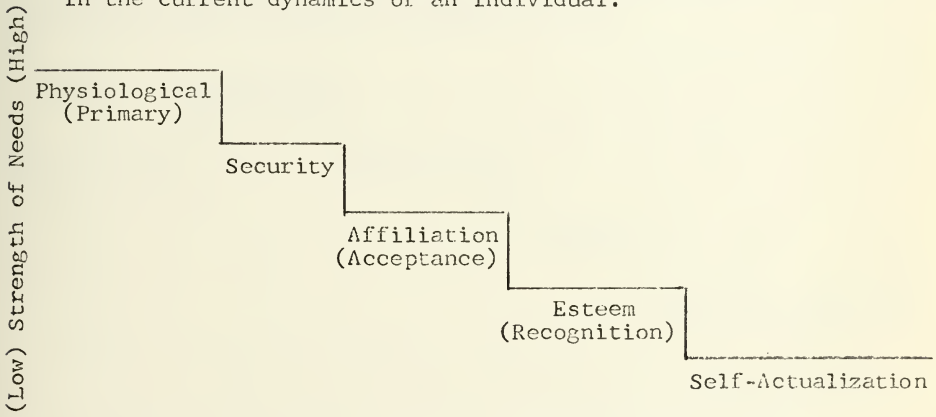

Fig. 6.--Hierarchy of Needs--Physiological Dominant

As soon as physiological needs are satisfied, security or safety needs will rise to be dominant. The hierarchy will now look as represented in Figure 7.

Safety Needs

Safety needs are acquired during childhood. At that time they are answered by a warm blanket, a happy home, and a fair and

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[1]Maslow, op. cit., p. 84.

pleasant teacher. During childhood we develop the sense of routine and rhythm that usually retains great importance when carried into adult activities. It is then that we become "creatures of habit." Translating this need to the job, the purpose of unions (there's safety in numbers), the teacher's concern with tenure (legal protection is reassuring), and the executive's interest in the stock option plan (economic stability makes him less vulnerable), can easily be understood. Additionally, safety needs include the more obvious when they pertain to personal safety.

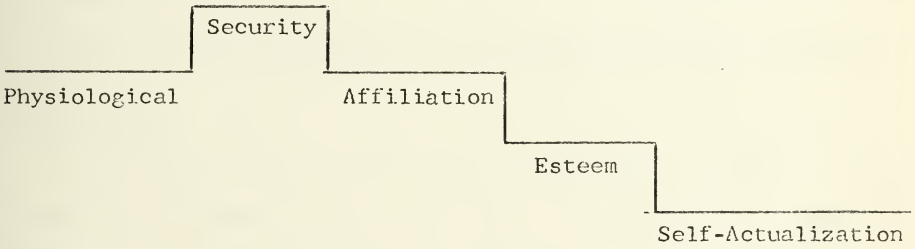

Fig. 7.--Security need when dominant in the need structure

Recognition Needs

Also known as the love needs or affiliation needs, this set of human requirements serves as a basic reason for the existence of organizations in society. Realizing that most of man's actions occur in groups, such as the family and the work group, these needs, if properly accommodated, satisfy our desire to be liked, to be accepted, to be loved. Friends and family, and the approval of our fellow man, are now terribly important. To be without love, understanding, and approval would be felt most keenly. It should be

added here that love, as used in the context of Maslow's hierarchy, is not synonymous with sex. Sexual behavior is probably multi-determined, and is a function of several of the hierarchial levels. In simplest terms it may be considered, however, like hunger or the need to sleep, in physiological terms.[1]

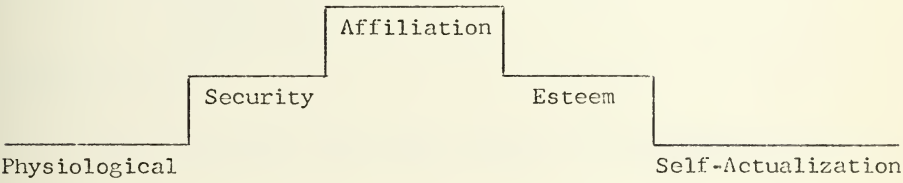

Fig. 8.--Affiliation need when dominant in the need structure

Esteem Needs

Everyone has need for a high opinion and evaluation of himself. This is required for self-respect as well as the respect of others. Maslow further describes these as

> . . . the desire for strength, for achievement, for adequacy, for mastery and competence, for confidence in the fact of the world, and for independence and freedom. Then there is the desire for reputation or prestige, status, dominance, recognition, attention, importance, and appreciation.[2]

Strongest of these, in adults, is the need for the approval of others, but one management study suggests that the opposite conclusion must be reached when one observes "men in action" toward

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[1]Berelson and Steiner, op. cit., p. 49.

[2]Maslow, op. cit., p. 90.

the achievement of goals. Desire for prestige is often subsidiary to the desire for confidence in one's self.[1]

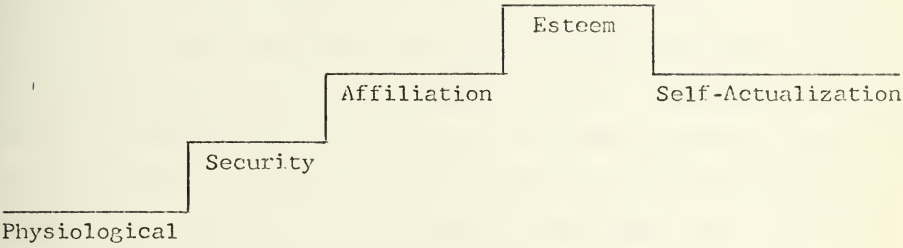

Fig. 9.--Esteem need when dominant in the need structure

Self-Actualization Needs

After all human needs are seemingly satisfied we may still often expect that new discontent and dissatisfaction may develop unless the individual is doing what he is fitted and best suited for. How often we see a successful and accomplished individual start anew, delve into the unknown, or strive for the impossible! Unless a man is doing what he is capable of doing, or being what he wants to be, "doing his own thing" in contemporary terminology, a part of his complete make-up is missing and is not satisfied. Maslow considered this the pinnacle of human aspirations, at the top of the hierarchy, and said that

> A musician must make music, an artist must paint, a poet must write, if he is to be ultimately happy.

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[1]David R. Hampton, Charles E. Summer, and Ross A. Webber, Organizational Behavior and the Practice of Management (Glenview, Ill.: Scott, Foresman and Company, 1968), p. 33.

> What a man can be, he must be. This need we call self-actualization.[1]

Through the eyes of management it is easily seen that self-actualization is the need for workers (some at least, if not all) to push and prod themselves continually as the need may dictate, to reach higher and never-quite-arrived-at goals. Buy why, it may be asked, are some people quite content to remain in place, never advancing beyond a certain established level of achievement? The answer lies in the fact that people are different, and that their range of motives, while certainly alike in conforming to the hierarchial need pattern, is sufficiently different to permit satisfaction at varying levels.

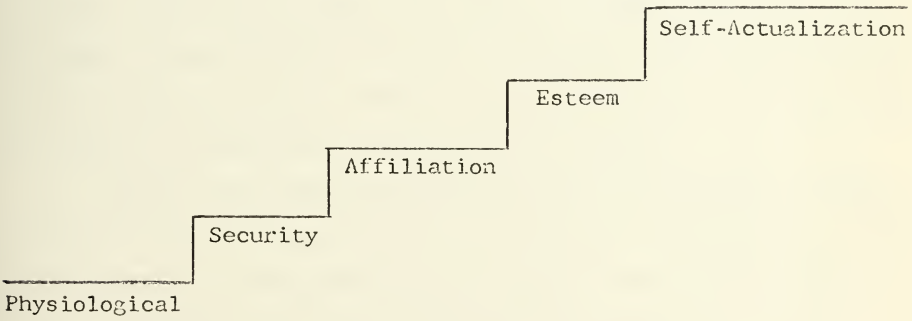

Fig. 10.--Self-actualization when dominant in the need structure

Harold J. Leavitt examines people's differences as they influence the motives to work. From his studies Leavitt has con-

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[1]Maslow, op. cit., p. 91.

cluded that any one person "may come up with a variety of motives to fit his particular case."[1] He feels that if a survey of American workers were taken at random, typical answers to "Why do you work?" would include:

> I work for money and the food, shelter, and goods money buys.
> I work for status and recognition.
> I work to belong; to be part of the group.
> I work to get to the top.
> I work because it's only right that people should work.
> I work for knowledge and understanding.
> I work for security.
> I work for the feeling of accomplishment I get from a job well done.[2]

The reader will quickly notice that Leavitt's list contains all of the needs of the Maslowian hierarchy. Also, going back to the question, "What do you want from your job" asked by Herzberg, his findings indicate similar levels of importance placed by workers on various reasons to work. Table 3 shows values of 1 to 10 (10 being the highest) associated with reasons for working.[3]

Maslow concludes his presentation by enumerating a number of preconditions for basic need satisfactions at all levels. These are important to management as they set the tone of the climate in which motivation will either flourish or be thwarted. The conditions are:

1. Freedom--to act, to speak, to be;
2. Cognitive capacities--the perceptual, intellectual, and learning abilities of the individual;

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[1]Leavitt, op. cit., p. 14.

[2]Ibid.

[3]Hersey and Blanchard, op. cit., p. 35.

3. The desire to know and to understand--a worker cannot operate in a foreign or strange environment;
4. Conative needs--striving, but not always sure of the target.[1]

TABLE 3

WHAT DO WORKERS WANT FROM THEIR JOBS?

	Ranking
Good working conditions	9
Feeling "in" on things	2
Tactful disciplining	10
Full appreciation for work done	1
Management loyalty to workers	8
Good wages	5
Promotion and growth with company	7
Sympathetic understanding of personal problems	3
Job security	4
Interesting work	6

A last comment on hierarchial aspirations. Laurence J. Peter, in his facetious, highly entertaining, but not at all unreasonable book The Peter Principle, discusses how his observations of the practice of "hierarchiology" have demonstrated that the "Peter Principle," which states that "every employee tends to rise to his level of incompetence"[2] applies to all workers at every level. In a quite serious connotation this may well explain both Leavitt's idea of human differences and Maslow's self-actualization premise.

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[1]Abraham H. Maslow, "A Theory of Human Motivation," in Wadia, op. cit., pp 126-128.

[2]Laurence J. Peter and Raymond Hull, The Peter Principle (New York: William Morrow & Company, Inc., 1969), p. 25.

Different people simply reach their goal (to Maslow a level of being satisfied, to Peter a "level of incompetence") at different places in the wide spectrum of the possible movement within the hierarchy.

The Hawthorne Experiments

Beginning in 1927, the Western Electric Company commissioned Elton Mayo to conduct a series of experiments to determine the relationship of social factors to work. Mayo, then a Harvard professor, was financed by the Rockefeller Foundation to study attitudes, reactions, and other work-related factors of people in work groups under varying conditions. The study was carried out at Western Electric's Hawthorne plant, in Cicero, Illinois.

Mayo commenced his studies with the assumption that "the human reactions of people engaged in productive work have a much more important effect on their morale and efficiency than had previously been realized."[1] With his team of associates[2] he set out to show that the physical aspects of the job, such as comfort, light, and general working conditions, are much less important than the feelings which the worker has toward his job, his co-workers, and his bosses.

In order to establish laboratory conditions from which to

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[1] Roethlisberger and Dickson, op. cit., p. vii.

[2] A study of this magnitude naturally required a great degree of team effort. Mayo had at his disposal the energies of many of his Harvard colleagues, and the full support of the workers and the management of the Hawthorne plant. Fritz Roethlisberger, author of the definitive report on the experiments, has become a significant contributor to the behaviorist school on his own.

draw applicable conclusions, the researchers conducted many tests a number of times, and under similar conditions. From this method of observation the researchers drew their opinions in four areas of worker-employer relationships: 1) working conditions and employee efficiency; 2) employee relations (with company); 3) a scheme for understanding of employee dissatisfaction; and 4) the social organization of workers.[1]

Working Conditions and Employee Efficiency

Foremost in interest were the well known illumination experiments. Briefly stated, they consisted of a number of groups of assembly operators (usually for the assembly of relatively small parts or electrical components, such as coils, relays, or tubes) having similar qualifications. The majority of the test-groups consisted of young women of similar age, background, and experience in the company.

By having one group working in well-lighted, or "ideal" surroundings, while another's light was periodically reduced until it became too poor for comfort, it was found that the girls' general attitude, happiness (or lack of it), and--most important--output, remained essentially constant. Where it was previously taken for granted that poorer light would produce poorer or less work, these tests indicated to Mayo and Roethlisberger that relatively little, if any at all, of the physical conditions surrounding the job,

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[1]This forms the general framework of Management and the Worker. Proposed applications to practice are added by the authors.

provided they do not provide out-and-out discomfort, have any real influence on output and on employee happiness.[1]

Similar observations were gathered out of the experiments with rest pauses. (The "coffee break," which has become so terribly important to today's secretary, and practically mandatory to unions, was not yet an institution.) Here it was learned that rest periods were generally liked, but were not always welcome. "I don't like these rest periods. I just got started to work, then have to stop. When I come back I don't feel like working."[2] This report from at least one worker reflected only part of the group's attitude, the other side of the coin being shown in "Gee, that five minutes was like a dream, it went so quickly."[3]

The conclusion drawn from rest-period observations, giving rests at different times and of different lengths, was that differences of opinion about their value exist among the girls, but that these differences do not materially reflect over-all satisfaction. Output and motivation on the job are therefore not a function of coffee-breaks![4]

Throughout the course of the experiments great care was taken to provide for the comfort and satisfaction of the girls comprising the groups studied. The "bogey"[5] was eliminated, physical

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[1] Roethlisberger and Dickson, op. cit., pp. 15-18.

[2] Ibid., p. 50. [3] Ibid., p. 41. [4] Ibid., pp. 55-59.

[5] A bogey is a wage-rate adjusted on the formula of an "average" output for an "average" worker.

health and well-being became a matter of great concern, and opinions, qualms, anxieties, and fears were sought out and solicited.[1] This, then, led to the conclusion that these were the factors important to the Hawthorne workers.

Employee Relations

Intended as a plan for improving employee relations, a number of experiments were carried out toward that end when it had become evident that there was a close relationship between employee morale and supervision. Mayo called this the "interviewing" phase of his study, having used the interview to "get at what it is that bothers both the workers and their supervisors."[2] Fritz Roethlisberger, in his 1941 study of motivation of workers on the job, Management and Morale, describes how the Hawthorne experiments on employee relations fostered the development of a new concept of "getting along":

> . . . it began to percolate in the higher ranks of supervision and to the higher executives of the company. They found that one of their functions as supervisors and managers was to listen to, and become better acquainted with, the sentiments of their employees and with the nature of that social structure, or system, or sentiments, called "the company." . . . . They (the supervisors) began to understand better why the reports they received from their immediate subordinates as to what was happening at the front line, after having been transmitted through an elaborate supervisory hierarchy, did not quite coincide with what they learned from the interviewing program.[3]

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[1]Roethlisberger, et al., op. cit., p. 181.

[2]Ibid., p. 189.

[3]Roethlisberger, Morale, op. cit., p. 44.

What it was they learned, in other words, is the fact that management and workers are not always operating on the same frequency of understanding, and that there is great value in striving to improve the channels of communication that would nurture that understanding.

Mayo and associates hoped that an understanding of the importance of leadership by managers would set the scene for improved employee relations. And since this proved to be true at Western Electric they assumed it to be applicable everywhere.[1]

Understanding Employee Dissatisfaction

Employees at the Hawthorne Works, like employees everywhere, had a number of complaints which were soon evident to the Hawthorne researchers. "Pay rates are too low," "this machine is out of order," "ability is not rewarded," and "_____ is unfair," were typical of the comments encountered.[2] These complaints were analyzed and divided into three classes:

Class A complaints--involving the sensory experiences, things that can be touched. This includes matters relating to the physical operations which make workers either happy or unhappy, things like lifting, handling in various ways, and counting.

Class B complaints--involving the physical being experiences (Maslow's primary needs, which when applied to worker motivation must be satisfied in order to achieve productivity), things like hot, or cold, pain, thirst, hunger, illness, and fatigue.

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[1]Roethlisberger and Dickson, op. cit., p. 191.

[2]Ibid., p. 258.

Class C complaints--involving the "hopes and fears" of the employees. Comments regarding pay, opinions of supervisors, and the company's recognition and appreciation of one's abilities and talents, fall into this category.[1]

In simplest terms, by isolating given complaints as being relative to one or more of these categories, it was determined that a simple understanding of the cause and effect of the complaint would help in eliminating it. This finding was to be of inestimable value to both management and worker.

The Social Organization of Workers

A shortcoming of the American industrial scene is the lack of understanding for the social structure of workers. The human activities of industry are conceived to be primarily economic. This of course is counter to the humanist approach to work, as exemplified by the findings of Gantt and the Gilbreths, and by Elton Mayo and Fritz Roethlisberger.

"Whenever a person acts in accordance with the expectations and sentiments of some other person, or groups of persons, his behavior is social or socialized,"[2] is the premise from which the Hawthorne experience saw worker socialization. Obviously, with this definition all interaction among employees is thus of a social nature. In fact, Roethlisberger saw this as an explanation of all human behavior involving two or more people, "occurring in the

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[1] Ibid.

[2] Roethlisberger, op. cit., p. 47.

breadline or on the fox hunt, and by the millionnaire socialite owner of the factory as well as by his most lowly skilled worker."[1,2]

The important observation gained from the Hawthorne study is that the role of the social organization within a group, be that a workroom, a shop, or a department, is significant to an individual's identification with his role in the context of the total operation of that group.[3] If the social climate of the work-group is a happy one, and the worker feels well integrated, the employer benefits. He has a happy, and productive, worker. The exact opposite is of course true, as has been so often demonstrated.[4]

Practical Results of Hawthorne Studies

Principal findings all pointed to a continual restatement of the human problems of management. Human needs and human requirements, regardless of the situation of the moment, are the key to all understanding of "what makes people tick." This is the ultimate road to achieving maximum employee motivation.

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[1] Ibid.

[2] It is important to have a precise understanding of what social behavior is. As explained by Roethlisberger, it does not necessarily conform to the interpretation given the word by most writers on the subject. At least one textbook in human behavior, Human Behavior in Organizations, by Leonard R. Sayles and George Strauss (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1966), makes a detailed point of the fact that social relations of workers relate to off-the-job contacts and activities, or at most only a limited amount of socializing while at work.

[3] Roethlisberger, et al., op. cit., p. 548.

[4] Edgar H. Schein, in his Organizational Psychology, op. cit., discussed the nature of group climate, in a psychological-sociological orientation, at great length.

The concluding paragraphs of Management and the Worker sum up the chief need of management in this regard:

> Management should introduce in its organization an explicit skill in diagnosing human situations. The skill should be "explicit" because the implicit or intuitive skills in handling human problems which successful administrators or executives possess are not capable of being communicated and transmitted. They are the peculiar property of the person who exercises them; they leave when the executive leaves the organization. An "explicit" skill, on the other hand, is capable of being refined and taught and communicated to others.
>
> By means of this skill management should commit itself to the continuous process of studying human situations--both individual and group--and should run its human affairs in terms of what it is continually learning about its own organization.[1]

What Motivates?

Having looked at both the principal psychological theory of motivation, and the most respected industrial examination of what it is that concerns workers on the job, it is now felt important to summarize some of the aspects of what it is that motivates. Robert McMurry suggests that "Management often fails to learn from its errors and perpetuates practices which successfully alienate it from the workers."[2] This statement can be construed as a catch-all of the feelings that create a rift of misunderstanding for people on the job. First, therefore, is a need for understanding.

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[1]Roethlisberger and Dickson, op. cit., p. 604.

[2]Robert N. McMurry, "Conflicts in Human Values," in Management: A Book of Readings, ed. by Harold Koontz and Cyril O'Donnell (New York: McGraw-Hill Book Company, 1964), p.366.

Understanding the Worker and Management

The degree of satisfaction a man (a worker, a person) feels, or the productivity or measurable results he achieves, depends on the nature of his needs, his wants, and his desires. These are his motivations. However, that satisfaction and achievement depend on more, as was borne out in the Hawthorne studies. Additionally, skill, environmental considerations, and a host of social and psychological factors influence motivation. Man is complex, variable, and unpredictable. Understanding must be a continuous search for reality in the context of a given situation. But understanding, of the worker by management, and of the goals and aspirations of management by the worker, is the answer.[1]

Leadership

Management's interest in leadership stems from the fact that a leader (manager, supervisor, etc.) not only has the fundamental responsibility for getting work done through people, but he also controls the means of human need satisfaction in an organization. Knowledge and comprehension of the art of leadership and its relationship to performance, such as work output, is consequently an absolute essential.[2]

Leadership Defined

In no arena of human activity has leadership been more

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[1] "Management" here means at all levels, from supervisor to Chairman-of-the-Board. Organization, in the sense that it dominates, as does corporation, is included.

[2] Heyel, Encyclopedia, op. cit., p. 288.

greatly examined and more thoroughly defined than in the military. Leadership here is management in the truest sense and in its fullest meaning. And it is management with all of the behavioral connotations: the military manager's greatest assets are his human resources, or his men.

The late Douglas Southall Freeman, famed biographer of Lee and Washington and master of history, used to say that leadership boils down to three fundamentals:

> Know your stuff.
>
> Be a man.
>
> Look after your men.[1]

Few words for much thought indeed! It would take little else to make all that is implied in these simple statements applicable to all facets of leadership in organizations of all sorts, clubs, the social group, the factory, the office. Enlarging on the definition of leadership, U. S. Navy Regulations state that

> . . . all commanding officers and others in authority are required to show themselves a good example of virtue, honor, patriotism, and subordination; to be vigilant in inspecting the conduct of all persons who are placed under their command; to guard against and suppress all dissolute and immoral practices, and to correct according to the laws and regulations of the Navy, all persons who are guilty of them; . . . to promote and safeguard the morale, physical well-being, and general welfare of all persons under their charge.[2]

With only the slightest modification, and the change of a few

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[1]Gerald C. Thomas, Robert D. Heinl, Jr., and Arthur A. Ageton, The Marine Officer's Guide (Annapolis, Md.: United States Naval Institute, 1967), p. 334.

[2]U. S. Navy Regulations, 1948.

words to remove the military flavor, this could well be the motto of every manager in America who is genuinely concerned with his role as a leader.

In the application of leadership to a business enterprise, Ray A. Killian enumerates a most interesting list of activities and functions "into which effective leaders (executives, managers, business and industrial supervisors) must fit":

1. Leaders maintain respect. A leader must respect the individuality, the dignity, and the needs of everyone in his particular group, and through that respect earn and be worthy of the respect of others because of what he does and is.

2. Leaders work effectively with people. Handling people is leadership in action. Human resources are the principal asset of the leader, and it must follow that his own contribution to the group effort will be dependent on the success he realizes in utilizing these resources.[1] Effective leadership must be based on identifying and implementing the principles of human relations.

3. Leaders are responsive to the needs and desires of others. They must be sensitive to the desired course of action, and must understand both the long-range and immediate needs of those who are expected to follow.

4. Leaders are knowledgeable. Success may hinge on knowing more about a subject than others do. A leader must understand the total situation. He must have broad general information as well

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[1]Notice the similarity to the definition of leadership implied in Navy Regulations, op. cit.

as, in a business for instance, the command of the myriad nuances and intricacies involved in that business.

5. Leaders possess superior motivation. Knowledge and ability has value only when it is set in motion by motivation.[1] A leader should have an intense desire to get things done, and through his drive, his belief in the organization and in the task, and his ambition, stimulate others into action.

6. Leaders are inspired and enthusiastic. Closely related to self-motivation, these qualities tend to encourage and direct others' actions in a positive manner. They are the underlying qualities of the essence of leadership.

7. Leaders tap and utilize every resource. Superior leadership implies the recognition of contributions that every resource available to him can make, and the skillful use of these resources. Leaders capitalize on the organizational environment and the leadership of others. The potential available to the individual leader is that of the organizational environment in which he works, and the leadership of those who can contribute to his own success. Additionally he learns about leadership from others, those who lead him, and those he leads. By observing them, and coordinating his efforts to be most useful, he will achieve success.[2]

Killian further states that "to motivate employees to accomplish maximum results, the supervisor must appeal to them in a

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[1]See Ray C. Hackman, The Motivated Working Adult (New York: American Management Association, Inc., 1969), pp. 154-159, for a discussion of the importance of managers' motivation.

[2]Ray A. Killian, Managers Must Lead! (New York: American Management Association, Inc., 1966), p. 31.

way that elicits a positive response."[1] By observing the rules of good leadership, no manager should fail in his search for that response.

"Be Good"

An additional important point is a leader's need to wisely use praise or reprimand as the situation requires. In satisfying man's greatest personal need of self esteem, it is important that the leader give praise when praise is due. Tell workers when they have done a good job. Some people are of the opinion that one should never be commended for doing a job he was obligated to do; this is not true. Commend men for a good performance on ordinary jobs and it will pay off in better performance on all jobs. It has been shown that

> . . . the effect of positive versus negative comment on performance indicates that public commendation, private reprimand, public reprimand, public ridicule, and public sarcasm are effective in the order named, and that either commendation or reproof are considered superior to being ignored.[2] (emphasis added)

Praise is a form of evaluation by management and as such gives recognition to the worker. It is a prime factor in motivation. The following are some useful guides that a leader should consider prior to praising an individual:

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[1] Ibid., p. 93.

[2] Douglas H. Fryer, Edwin R. Henry, and Charles P. Sparks, General Psychology, as quoted by Henry R. Jones in "Human Relations: Some Concepts for Better Leadership" (unpublished M.B.A. Thesis, George Washington University, 1953), p. 33.

1. Praise should be fitted to the individual; thus some knowledge of how he will react is required.
2. Consideration should be given to the manner in which praise will affect the morale of other employees.
3. Oftentimes praise that reaches an individual in a round-about way is very well received.
4. It is often effective from the standpoint of group morale to praise the work rather than the worker.
5. Praise that is too lavish may lose its effectiveness.
6. Be sure that the worker who is being praised believes that it is deserved. He should sense the superior's sincerity and feel that the praise is not given for an ulterior purpose.[1]

While giving praise is an excellent motivator, it has its dangers. It may lead to a slow-down in productivity, it may be regarded by fellow workers as favoritism, and finally it may result in the leaders having to use it frequently to keep less confident people at minimal production levels. However, regardless of these inherent dangers, praise should be given because it does fill a need.

Reprimand, if misused and misdirected, can be an even more damaging management tool. Generally a worker who feels he "has it coming" expects to be reprimanded, but no degree of effort can overcome the harm done by the faulty use of the reprimand. If, for example, it is necessary to deal with a marginal performer, i.e., a worker not measuring up to expectations or to standards, it is wise to determine why he is marginal before reproving him. He may be plain lazy or incompetent. In that case he should be reprimanded. But he may lack the capacity to do his job in terms of education, emotional or behavioral problems (alcoholism, a pending divorce, etc.), or it may be a simple case of misplaced

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[1]John M. Pfiffner, The Supervision of Personnel (New York: Prentice-Hall, Inc., 1951), p. 252.

talent. Whatever the case, it is incumbent upon the manager to determine the cause of difficulties and to deal with them in a manner serving the best interests of individual and management. Motivation, at whatever level it exists, can thus be retained or hopefully even improved. Mismanagement of the situation, however, can block the way of progress irreparably.[1]

Supervision

Supervision of the worker, indicating to him both to what level he is considered trustworthy and how much his bosses care about him, is a further useful tool in managing for motivation.

Rensis Likert says that:

> We are consistently finding that there is a marked relationship between the kind of supervision an employee receives and both his productivity and satisfactions which he derives from his work. When the worker (or any person at a level in a hierarchy) feels that his boss sees him only as an instrument of production as merely a cog in a machine, he is likely to be a poor producer. However, when he feels that his boss is genuinely interested in him, his problems, his future, and his well being, he is more likely to be a higher producer.[2]

It would seem that this observation is closely related to the type of leadership under which the employee operates. As reinforced by comments such as Likert's, and as expressed by the many military statements on the subject, it is an accepted fact that leadership,

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[1]Hardvard Y. Weatherbee, "Steering Marginal Performers to Solid Ground," Personnel (July/August, 1969), 34.

[2]Rensis Likert, "Motivation: The Core of Management," op. cit., p. 232.

or more precisely a leader, can have an immense effect on the performance of those under him.

Styles of Leadership

It is currently believed that a manager's leadership style ranges across a spectrum of several approaches:[1]

1. Traitt Approach--based on the notion that a study of successful leaders gives clues into the personality and character traits of that leader. Theoretically it should thus be possible to duplicate a Moses, a Bismarck, or a Churchill, and as it is generally felt that leaders are made--by education, skill, or a matter of historical consequence--this may be so. It is generally believed, however, that this approach, especially as applied to executive leadership, is at best inconclusive.

2. Situational Approach--here it is the dimension of a given situation that determines who will evolve as a leader of a group. This situation implies no quality of leadership that sets that leader apart, except that he is able to grasp the situation to his advantage.

3. Functional Approach--most leaders, to one extent or another, perform four major leadership functions:

a. decision-making (Chairman-of-the-Board), with implementation carried out by others;

b. information--providing (comptroller), giving advice for management planning;

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[1]The material in this part is based heavily on Lippitt, Organization Renewal, op. cit., Chapter 5; and Koontz and O'Donnell, Principles of Management, op. cit., Chapter 27.

c. planning (corporation executive staff), detailing a future path based on known factors; and

d. symbolic (non-participating, or "honorary" position), giving primarily stature, prestige, and political influence to an organization.

4. Styles Approach--incorporates the styles of leadership dictated by the qualities of the leader, the nature of the organization, and the situation. Three styles are generally acknowledged.

a. Autocratic--manager dictates all policy, makes all decisions with little or no regard for outside pressures or influences. It is obvious that in most business situations, particularly in the modern American context, this form of leadership cannot hope to survive.

b. Democratic--a "give and take" proposition where a manager makes decisions based on advice and counsel, as well as on the potential outcome of planned action. This is the form of leadership which is most prevalent in business today.

c. Laissez-faire--manager takes a "hands-off" attitude and lets the organization chart its own path. In the competitive world of American business there can be little room for this kind of leadership.

Figure 11 shows a relationship of the varying styles of leadership which may exist in an organization. The typical case is one where no clearcut assignment of style to any individual or situation is possible, but where style and approach will change as the situation dictates.

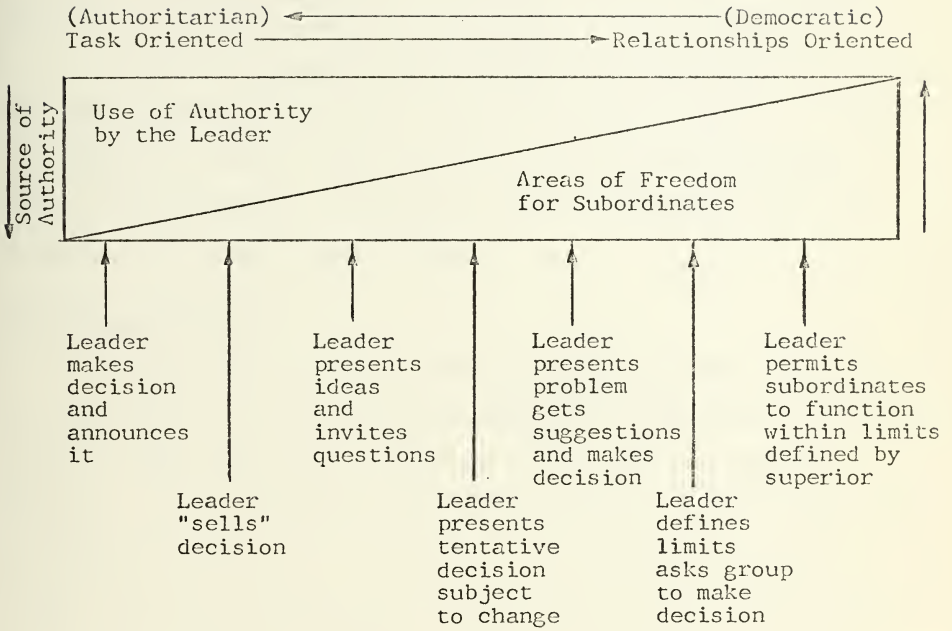

Fig. 11.--Continuum of leader behavior

A fourth style of leadership rests somewhere between the autocratic and democratic. This manager is known as the "benevolent autocrat," and he enjoys a position somewhat like that of Peter the Great during the latter portion of the eighteenth century. Having the authority of his position, and, hopefully, the wisdom that position requires, the benevolent autocrat knows at all times what degree of pressure vis-a-vis freedom a given situation requires at a given time. Lippitt reports this type of leadership to be most

favored in American business enterprises today, with some 70 per cent of all business leaders subscribing to this philosophy.[1]

Further explanation of "knowing when what is best" rests in the understanding that no one style is "good" or "bad," or "right" or "wrong" in itself. There can be no set style of leadership which one can develop. Leadership must be flexible to meet the needs of any particular situation.

The Managerial Grid

The various styles of leadership ranging from autocratic to laissez-faire, as identified in Figure 11, have been incorporated into the Managerial Grid by Robert R. Blake and Jane Srygley Mouton.[2] On the assumption that every leader in organizations has a concern for people and for production ranging from "low" to "high," they have constructed a graph which allows every combination of the possible leadership traits to be placed on a scale measuring 1 to 9 in both categories. Consequently the autocrat, with his low concern for the human values, would rate somewhere near the 9,1 intercept. Figure 12 shows how Blake and Mouton rate the styles of leadership.

The implications of the grid measurement for managerial leadership and for motivation are obvious. The ideal is the 9,9--but he is the most elusive. The 9,1 gets the job done, but as he does so at the expense of his workers' feelings and values, he

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[1]Lippitt, op. cit., p. 86.

[2]Robert R. Blake, and Jane S. Mouton, "Work Team Development," Training, June, 1968.

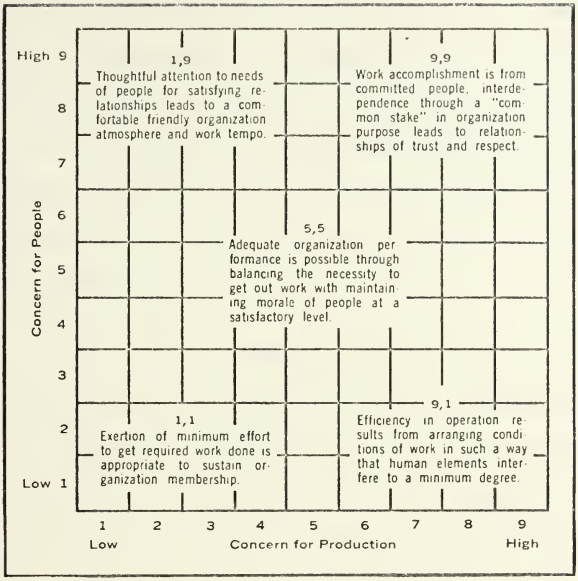

Fig. 12.--The Managerial Grid

often suffocates the potential for motivation which may exist. Equally defeating is the 1,9 leader. While devoting all of his energies to his workers' happiness he fails to accomplish his goals and his tasks. And, as shown by Maslow and Herzberg, this is not what motivates workers.

In reality, Blake and Mouton have found that the 5,5, the "gray man in the middle," is the most prevalent type of manager. But he is not the best, as would be a 9,9, as he represents a degree of mediocrity and lacklusterness. Compromise is his hallmark, and he will compromise both his people and his mission in order to

achieve harmony, good will, and partial success. Blake and Mouton see this style of management as representing "a compromise mentality of managers."[1] They feel that American organizations fall short of a great deal of their potential because of this phenomenon, and they hope that their grid will point out those areas of weakness which will motivate managers toward striving for the 9,9 combination of traits.

Communication

Serving management as an adjunct to realizing motivational goals through leadership, the powers of effective communications cannot be overlooked. One writer feels that communication has absolute control over any and all forms of leadership, saying that "leadership is impossible without communication between persons."[2] Regardless of the degree of absoluteness, few would disagree with the idea that communication is vital. Communicated between people are ideas, facts, feelings, and intentions. This includes things like instructions, praise, prejudices, and enthusiasm, all of which are qualities of leadership.

In order for a worker to feel motivated toward his task, and in order to identify with his organization, i.e., the goals set by his boss, he must know what is going on. As learned by management students from Taylor on, "feeling left out" is one of the big

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[1]"Grid Puts Executives on the Griddle," Business Week, October 18, 1969, pp. 158-160.

[2]William H. Newman, Charles E. Summer, and E. Kirby Warren, The Process of Management (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1967), p. 611.

complaints of workers. It is the responsibility of management to clear the necessary obstacles toward implementing useful channels of communication from top to bottom and from bottom to top within an organization. The view of communication as a morale builder--thus a motivator--is well expressed in the following:

> Management should have daily contacts with its subordinates all down the line. Foremen should keep' workers informed of company plans and policies as they have been received from superiors.[1] It is also the foreman's duty to see that what the worker is thinking, questioning, and planning goes up the line for management's consideration and action. It seems obvious that communication up and down and across is necessary if a spirit of belonging is to be built within an organization. Management "sharing" is a vital stimulation to employee "belonging."[2]

Communication, then, evolves as a link between management, the formulator of policy, and the work force, the implementor of policy. A breakdown in communication can have the most damaging consequences and must at all costs be avoided or at least minimized.

Some of the common barriers to organizational communication include:

1. Nature of the organization--centralized management may make it difficult to "get out the news"; physical locations in a decentralized situation may create barriers of time and distance; technical and otherwise confusing language (argot) may be a natural if unintentional stumbling block.

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[1]See the section on the budget, infra, for the importance of making company plans and policies applicable and meaningful to employees.

[2]Henry G. Hodges, "Management: Principles, Practices, and Problems," in Dale, Management: Theory and Practice, op. cit., p. 466.

2. Defects in the formal communications network, caused by inefficiencies in the system or in the people who operate it, may exist.

3. Status and role ambiguities--individuals' feelings about themselves, about their role in the organization, and about others; a lack of understanding of one's exact place.

4. Semantic differences exist among people--we often don't say what we mean.[1]

5. Personality differences in people often create hostility, clashes, and a seemingly purposeful "noncommunication."

6. Emotions--personal problems, feelings about self and others, attitudes toward the job.[2]

Although these problem areas are by no means complete, they give an indication of the kinds of obstacles management must learn to overcome.

Overcoming barriers to communication is often a very difficult task. In most business organizations it is an on-going process. Some techniques used are:

1. Utilizing feedback--"keep a sharp ear" for what is going on; make use of rumors, suggestions, recommendations.

2. Using all possible channels of communication, such as observation, nonverbal expressions, and workers' general activities as a measure of effectiveness.

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[1]"We're going to make some changes around here," says a shop foreman. To a bright and ambitious worker that means "You're getting promoted." To a gloomy and pessimistic worker it means "You're getting fired!"

[2]Sayles and Strauss, op. cit., pp. 238-296.

3. Use face-to-face communication to establish feelings of personal contact.

4. Use careful timing to introduce words and action.

5. Depend on relatively simple--understandable--language.[1]

Manager and worker both depend on effective communications. They must both be aware of the processes involved, and strive to reduce the possibility of breakdown.

The Budget

Not usually considered a part of a study of motivation, the budget is one of the most influential and least understood managerial tools applicable to getting people motivated. A budget, as a formulation of plans for a given future period, is generally considered to be a major, if not the principal, device for management control. In contemporary terms the budget is often indeed the most important of the many control vehicles available to management, but it must be remembered that many nonbudgetary measures, such as statistical analysis and EDP audit, are increasingly important in today's complex environment.[2]

Control is necessary as it is used as a measure of "how things are going." By providing feed-back from instituted programs and procedures, control devices indicate what sort of change in direction, if any, is necessary, this providing a thermostat of sorts. An example of how control devices are used is presently

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[1] Ibid., p. 257.

[2] Koontz and O'Donnell, Principles, op. cit., p. 651.

very much in the daily news. It is the effort by the Federal Reserve Board to control inflation and hopefully check the ever increasing threat of recession by manipulating the availability of money, tightening and loosening pressure (control) as appropriate.[1] The importance of making the right managerial decisions at the right time cannot here be overemphasized, and errors in judgment can have the most awesome consequences.

Returning to the budget as a control device, that is, as a measure of progress, several important facts need to be remembered. A budget will serve as an effective managerial tool--for control, for motivation, or for any designated purpose--only as long as it is realistic. Just as generals would be foolish to issue orders they know cannot be obeyed, so managers would be foolish to formulate budgets which they know cannot be met, and which would have as their result confusion, dissatisfaction, and a breakdown of employee morale, in addition to the obvious lack of monetary soundness. No employee, at any level within an organization, can feel motivated toward his job as a part of the organizational whole if he is expected to "do the impossible," and if he is not able to see himself in proper relationship to his task, his contemporaries, and his superiors. In budgeting, be it the budgeting of money or of human resources, as in all endeavors, it is well to remember that the effort of the whole is greater than the sum of its parts.[2] And, as

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[1]"The Rising Risk of Recession," Time, December 19, 1969, pp. 66-72.

[2]Crawford H. Greenewalt, The Uncommon Man (New York: McGraw-Hill Book Company, Inc., 1959), p. 54.

factors of human psychology influence individual, and thus group or organizational, performance, a realistic budget, while it may not be the ideal in that it does not reflect an organization's aspirations, will certainly be more effective in the context of the changing realities of the moment, whatever they may be.[1] In this light it will serve its many purposes best.

Further, a budget must be flexible. Events may prove that larger or smaller amounts should be spent for given components of a budget. An inflexible budget would prevent whatever adjustments would provide the desired new balance. This would again result in negative attitudes and weakening of morale. By providing flexibility to meet any unforeseen eventuality--with reasonable limits--management can assure itself of continued support for its policies and programs. (The "variable" budget is the obvious answer to avoiding inflexibility, but as the writer is concerned here with the budget only as it affects morale and motivation, rather than with the more technical aspects of budgeting, he shall not address himself to that matter further.)

Finally, a budget must be challenging. Fiscal officers, or any planners of budgetary programs, must consider that their advice to management should include provisions for a system wherein goals are attainable because of their realism. These goals must, however, be so devised that their attainment provides a degree of challenge, that is, an invitation to pursue a prescribed set of conditions

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[1]David W. Ewing, The Practice of Planning (New York: Harper & Row, 1968), pp. 108-109.

with the hope of arriving at a desired destination. Gellerman states that:

> . . . a realistically challenging budget is much more likely to tap whatever potential for achievement motivation is present than either a budget that appears to be scarcely attainable at all, or one that appears to be absurdly easy to reach.[1]

The apple from the top of the tree is usually much sweeter than the one that fell to the ground!

By employing the concept of staff-line consultation when formulating budgets, management can invite personal participation at all applicable levels of planning, and personal participation will engage the participants' personal motivations.[2] The resulting improvements are of benefit to both the organization and the individual. It is a well accepted adage that there is no understanding like that gained from experience. Thus, by evoking and involving personal pride and ego in the formulation of organizational plans, the organization can rely on the fact that all involved "will work harder to make the decision right by operating effectively within the limits of the budget or plan, than they would if they had not been involved."[3] On the other hand, if operating on the assumption that a budget is purely the result of another's judgment and efforts, there will be little personal motivation involved, and its outcome is not of great importance to the remote participant. Douglas McGregor likens the will to perform well because of one's

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[1]Saul W. Gellerman, Management by Motivation (New York: American Management Association, 1968), p. 236.

[2]Ibid., p. 235.

[3]Ibid.

personal involvement as a "commitment" to a cause or to an individual or organization.[1] He states that a worker (an employee, a partner, a member, a "part of" in any sense) will feel committed to do his best effort if he feels personally, deeply, and directly involved. Commitment can also be a great force toward motivation in general, quite apart from any discernible reason other than personal belief and devotion to serving a specific purpose or interest.

Assuming that the best of all possible situations exists within an organization, with a realistic and relevant budget employed by a highly motivated labor force under the guidance of enlightened management, it is essential that the budget now be permitted to do its job, without any outside interference, backdoor manipulations, and other matters of complication. Once a budget is approved and initiated, it should be left to guide the course of the organization, with the exception, of course, of such changes that may be effected out of necessity, and as approved by those exercising control. It is when a well thought out budget is applied and permitted to function that its real benefits are realized. The budget will now serve as a yardstick, giving a step-by-step evaluation of progress toward the stated goal.

As reported by Gellerman, one G. H. Hofstede conducted thorough and long-range studies of the effects of budget execution on management representing several companies within some six types

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[1]Douglas McGregor, Professional Manager, op. cit., pp. 125-130.

of industries in Holland.[1] Hofstede apparently learned that organizational climate is determined by financial controls and budget execution, and that workers tend to respond to the firm and often rigid organization represented by a "stick to it" approach to budgeting. It is safe to assume that an as equally extensive survey conducted in America would yield results similar to those found in Holland, workers and their motives being essentially the same everywhere. Hofstede further concluded that "a relevant and fair budget leads to sustained improvement of total performance."[2]

A budget will make possible the completion of a plan, causing the fruition of all the effort, thought, and talent that served as inputs. It will clearly delineate at any given moment "where we've been, where we are, and where we're going." Every person, hopefully involved and committed, will be able to measure his success or failure relative to the organization and to others like him within the organization. Management will see that it is making progress or is faltering, and, as in the case of a publicly owned corporation, the stockholders will see how their investment is faring, as reflected in the financial statements of the company.

One major American corporation never uses the word "budget." While using the budget religiously in its usual forms and for its usual purposes, General Foods considers their "profit plans" a superior management tool. Profit-planning connotes "life and activity," and the very word "profit" leaves a favorable impression.

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[1]Gellerman, Management, op. cit., pp. 233-234.

[2]Ibid., p. 234.

In this manner, through the use of a simple semantic gadget, General Foods makes its budgets pleasant experiences, which offer a personal motivation challenge to every employee. Seemingly such a plan works well, as, according to a published report of the experiment, "the employees strive to effectively live within the limits of the profit plan."[1]

The Paycheck

It is reasonably safe to say that a very great and significant motivator is the pay one can expect for working. Endless sociological and psychological studies will claim that this is not so. But the writer maintains that in the final analysis pay must be considered as a prime reason for working.[2] While there are probably many reasons why we all go back to the "same old job" day after day, the realities of feeding the family and paying the mortgage must always loom in the forefront.

"Money can't buy happiness," goes the old saying. In the world of business and industry, to workers at all levels, the usual

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[1]J. J. Curran, Jr., "Coordinating Budgets with Forecasting," in Readings in Management, ed. by Max D. Richards and William A. Nielander (Cincinnati: South-Western Publishing Company, 1958), pp. 315-317.

[2]Peter F. Drucker says in The Practice of Management, op. cit., that "financial rewards are not the major sources of positive motivation in the modern industrial society" (p. 312), but is quick to admit that pay is, however, "very important" to the worker (p. 303). As reported by Business Week (March 7, 1970, p. 78), straight pay took second place in importance during recent union negotiations with the United Rubber Workers' rank-and-file, with "better pensions" being a more important form of remuneration.

answer is "Yes, but it can certainly buy all the things that make me happy!" The unspoken assumption here is that money, in all the forms of remuneration that it may take on, is indeed important to one who works for it.

As it is with most things, in order to get something more one usually has to trade other things for it. More pay therefore requires more work. The most common reward for harder work trade-off in use in industry is the incentive system. This, quite simply, sets a rate based on given standards and rewards those who exceed it. It takes little experience with such a system to show that if I work just a little harder, or just a little faster, I will be well rewarded for my efforts. And soon after tasting the fruits of such reward the average worker will grow accustomed to the extra money and will "need" it as a regular part of his budget. Clearly, "money is an important potential motivating force in industry. It is important psychologically for the same reasons it is important economically: because it satisfies needs."[1]

In the winter of 1969 the writer and a group of fellow-students conducted a study of the importance of career motivation for the military officer.[2] Feeling that it should be obvious to anyone that a military career is not entered into by anyone searching for great fortune, it was intended to establish what relative

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[1]Leavitt, op. cit., p. 208.

[2]Karl H. Hutzler, et al., "A Survey of the Career Motivators of a Military Post-Graduate Class" (unpublished research project, School of Government and Business Administration, George Washington University, 1970).

value military compensation, as a total package of salary, in-service benefits, and retirement, actually held in the minds of a selected group of Navy, Marine Corps, and Coast Guard officers.[1]

Of the officers who responded to questionnaires used in this study--all were members of a Navy post-graduate program--only one indicated that "pay and fringe benefits" is of prime importance to him in his work. The attractions of the military which were indicated by the respondents to be the most rewarding were "interesting work," and "opportunity to lead and manage." As explained by Janowitz, pay is not a prime motivator, or even a measurable one, of military men. This study, brief and inconclusive as it was, provides an interesting glimpse into what motivates people in a small segment of our society.[2]

It is evident that money, as important as the writer wishes to show it to be, is only one of the many need-satisfiers of the worker.[3] Consequently it may or may not have great value in every

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[1]Morris Janowitz, in his The Professional Soldier (New York: The Free Press of Glencoe, 1960), likens the military career to one of service, much like that of the clergy. He says that anyone devoted to a cause, such as the flag or the cross, sees himself as a servant of society. Rewards of such service are immeasurable and are so great that they overshadow all else. The drive to serve is the single most important motivator of the professional soldier.

[2]See Appendix C for a copy of the questionnaire and a compilation of the conclusions reached.

[3]See Table 3, page 70, supra, for a comparison of what workers feel satisfies them. Note that pay has a relative weight of 6 on a 1-10 scale. This would make it seem important enough to consider it as a positive motivator.

instance.[1] William Whyte summarizes the social and cultural implications of money when he says that:

> Man is not born loving money. He has to learn to love it. This learning takes place in varying degrees in various parts of the world. In economically underdeveloped countries we find that the possibility of making more money does not lead people to do more work. They usually prefer to work shorter hours . . . to remain at the customary level.
>
> In our society too the response to money is a learned response; not is it uniform. Americans in general . . . seem to have a stronger interest in making more money and in the things that money can buy than seems to be found in most other parts of the world . . . . We must recognize that money is not the only reward, nor lack of money the only punishment, available in a given situation. We can expect almost any American who is offered more money to respond to it. The problem is, however, that other rewards and punishment always go along with it. Different individuals strike different balances between rewards and punishments, including money.[2]

What Whyte is pointing out here is that wages (or salary, or "remuneration packages") are not the absolute factor in providing worker satisfaction, but are in fact satisfying only in that they provide a relationship between the amount and some standard of comparison used by the individual. That standard is usually a concept of what is being earned by others. This has been borne out by Vroom in his study of the relationship of worker motivation to output when pay was adjusted from a too-low to a too-high level.[3]

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[1]Money, like everything else, has value in proportion to its influence on the recipient's life. A lottery win of $1,000 has far greater importance to the janitor than it does to the company president.

[2]William Foote Whyte, et al., Money and Motivation (New York: Harper & Brothers, Publishers, 1955), p. 210.

[3]Vroom, op. cit., p. 151.

He found that within any given work-group, all workers being on the same wage scale, productivity did not noticeably vary with pay. Individual members of a lower paid group, however, when permitted to compete for the wages of the higher paid, soon found themselves producing at record levels.[1]

Vroom equated his findings in the following formula:

$$\text{Performance} = f(\text{Ability} \times \text{Motivation}).$$[2]

As related to the cited example, the additional desire (motivation) to produce was obviously prompted by the chance for additional earnings, with ability remaining the same. When a wage differential was absent the motivation was not evident.

Summary

The following brief statements summarize the concepts of motivation and leadership which are felt to be important to the worker and to management:

1. Motivation and its relationship to human relations revolve around the interaction between the leader and the people with whom he works.

2. If a leader expects good performance from the work group, he must get them interested or enthused in the job. This enthusiasm is sparked if the leader can transmit his own enthusiasm and motivation to the work group.

3. Enthusiasm and motivation are enhanced if the leader considers a man's aptitude for the task and his ability to adapt to

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[1] Ibid., p. 252. [2] Ibid., p. 203.

the situation. Thoughtlessness may lead to failure which breeds ill will and destroys pride.

4. Motivation may be provided by appealing to man's ego. Every man feels he has superior qualities which in some way provide him with a source of pride. Leaders should cater to pride!

5. "Fit the man to the job," is an old maxim, and it is good common sense. Leaders should consider intelligence and experience of their workers prior to assignment. Never reduce an intelligent man to inactivity; allow him to work in his field; practical experience and knowledge are the keynotes to confidence and motivation. A man can perform better if he is "at home" with his work; the talent he brings into the organization must be used to the utmost.

6. A worker must be permitted to achieve self-actualization.[1]

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[1]Adapted from observations by Henry R. Jones, op. cit., p. 37.

CHAPTER V

THE APPLICATION OF MOTIVATION THEORY

It was the intention of this thesis to find out what--if anything indeed--is being done by American business enterprises to actively engage their workers' motivation. Three questions were directed at the companies contacted, as described in Chapter I, the answers to which provide information necessary to come to meaningful conclusions:

1. What programs for motivating your workers do you use?

2. How do you measure employee motivation, and what studies have you conducted in the past to gauge this motivation?

3. How do your workers identify with the over-all goals of your company?

In seeking answers to these specific questions it was also intended to determine if the theories of any one, or perhaps of several, of the contemporary behaviorists concerned with the subject of motivation are being applied by American industry. It was further intended to show that a "favorite method," or "preferred approach," to worker motivation is evident in practice.

For the purpose of illustrating how many important companies see the importance of worker motivation vis-a-vis their over-all plans, several representative cases, taken from material

submitted for the most part by the companies concerned, will be outlined. Appendix A contains a complete listing of the companies contacted, indicating their replies. In addition, Table 5 summarizes the various methods and instituted theories of motivation reported by the respondents, and Table 6 shows which names of management and motivation study theorists were most often mentioned as being important to the programs of the individual enterprises contacted.

Responses to the research question divided the companies into two categories. The first consists of those firms which continually carry out programs of executive training, work measurement, motivation through job-enhancement, and various other forms of measurement of the correlation of employee and corporate goals. The second category consists of those companies which, while acknowledging the importance of well-motivated workers, and appreciating research study and theory that is available, have rather sketchy or minimal programs in actual operation. There is actually a third category of respondents, those who for reasons known only to themselves saw no need to respond at all. They are identified in Appendix A.

Leading Companies' Approaches to Motivation

In the case of those corporations expressing a concern for leadership in the area of motivation and human behavior, leadership consists of the many functions of caring: about welfare, morale, workers' satisfaction, their happiness, and factors ad infinitum. It is obvious that leadership of this type contributes

to productivity, which in turn rewards the company with its many benefits. Gellerman states that:

> . . . when leadership contributes to productivity, it is usually because an atmosphere has been created which the employees regard as compatible with their psychological advantage. As a result, they are likely to involve themselves more wholeheartedly in their work. The employee is seldom aware of precisely why he feels free to give so fully of himself to his job; usually he can only point to the fact that his manager is a nice enough fellow, as are his fellow workers, and that the work itself is rather enjoyable. He cannot be more specific because there is nothing tangible to point to. He is reacting to a general atmosphere created by a managerial style that symbolizes a supportive attitude.[1]

It is in precisely this light that the companies listed are seen. Through management skills that have evoked positive, supportive behavior on the part of their employees, these companies have so directed corporate and individual energies as to reap maximum benefits for all.

American Telephone and Telegraph Company

Apart from the members of the computer technology industry itself, American Telephone and Telegraph is probably the most computerized company in the world. A large, diverse, and highly decentralized operation, AT&T has fully embraced all of the many available tools of the "new technology," and of the "new management" that follows suit.

As a truly progressive company it may be AT&T's natural lot to evolve as a leader in many areas, including research into employee motivation, human relations, and human behavior as it relates

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[1]Gellerman, Productivity, op. cit., p. 223.

to the "why" of working. Robert N. Ford is Personnel Director-Manpower Utilization at AT&T, and as such devotes his full attention to searching for better ways to motivate workers.[1] He feels that the crux of motivating workers lies in an understanding that it is the nature of the work, and the factors influencing a worker's opinion of that work, that create motivation. Ford feels that it is management's job to reshape jobs with two goals always in mind:

(1) He should aim to make the job as interesting and challenging as possible, and
(2) he should strive to let the employee's chance for achievement serve as the individual's motivator.[2]

In this manner AT&T elicits personal (individual) motivation from each worker, which, when coupled with personal commitment "from the executives down to the lowest level,"[3] is expressed in personal achievements such as commendations, pay raises, promotions, et cetera.

Ford makes a point of stating that if the supervisors' motivation is presented to the employees as a case for measuring their performance (group achievement, company-expressed goals, contests, and campaigns), that motivation exists outside the employee. "It would fail because it is our motivation as supervisors, not the individual employee's motivation."[4] Consequently, as stated in

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[1]Robert N. Ford is the author of numerous articles on worker motivation, and of the recently published book Motivation Through the Work Itself (New York: American Management Association, 1969).

[2]Robert N. Ford, "The Art of Reshaping Jobs," Bell Telephone Magazine, September/October, 1968, p. 29.

[3]Ibid.

[4]Ibid.

another article on the same subject, Ford believes that "the corporate purpose must be compatible with individual purpose."[1]

AT&T's "Work Itself" project, conducted by the staff of the Manpower Utilization Office, operates on the assumption that performance of a specific job can be better, that the motivation of workers is the principal consideration, and that new and improved techniques of management can be introduced and developed to meet these needs. Ford develops his approach along lines proposed by Frederick Herzberg in that he wishes to provide the hygienic motivators of "the conditions surrounding the job."[2] He further fully incorporates the human behaviorists' teachings when he says that "the 'right reason' for improving the work itself is simply because employees are human."[3]

By measuring results derived from the Bell System's attempts to "enrich" jobs, Robert Ford has collected some interesting statistics. Figure 13 shows four random personnel factors which were influenced as indicated.[4] Increasing efficiency, increasing productivity, and decreasing potential personnel problems can only have one very obvious result of increasing revenue. So it seems that Mr. Ford's efforts have benefited not only the company's workers, but management and stockholders as well.

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[1]Robert N. Ford, "Motivating People," Bell Telephone Magazine, July/August, 1968, p. 9.

[2]Herzberg, "Motivation to Work," op. cit., p. 305.

[3]Ford, "Motivating People," op. cit., p. 4.

[4]Ibid., p. 6.

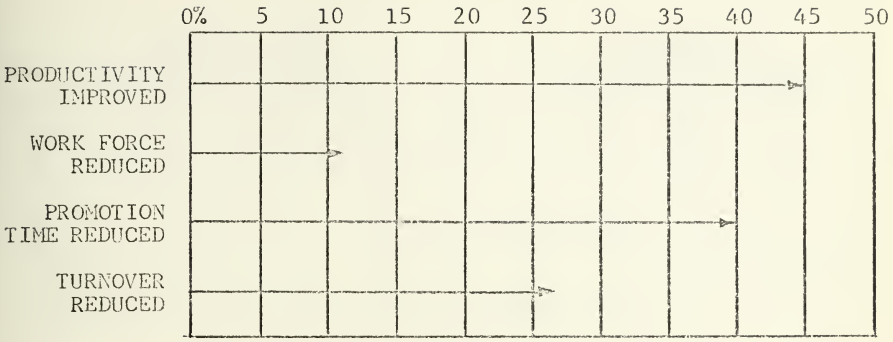

Fig. 13.--Increased Results Through Job Enrichment

An additional study conducted by AT&T, as reported in Figure 14, related job satisfaction and dissatisfaction to attitudes about the job.[1] This of course is merely another expression of how personal motivation has influenced the worker on the job, and has in turn molded his attitudes. It should be noted that factors related to the work itself are the greatest satisfiers, this reinforcing the concepts put forth by Mr. Ford.

The AT&T project is summarized by Mr. Ford's assertion that only two inputs and two outputs will generate motivation. With responsibility and achievement comes recognition and personal growth, and the motivator is thereafter automatically built in. And the job, by its very nature, elicits the best from every worker.[2]

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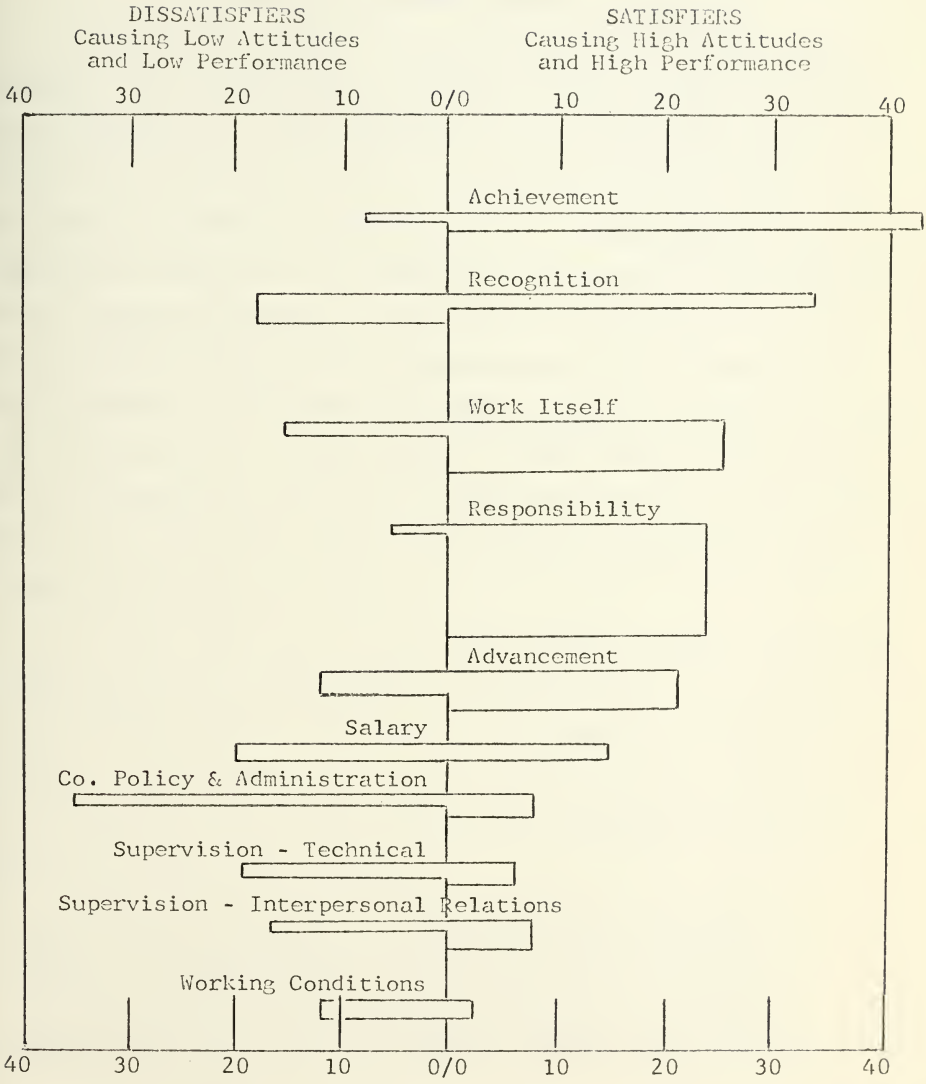
[1]Unpublished study, American Telephone and Telegraph Company, n.d.

[2]Ford, "Art of Reshaping," op. cit., p. 30.



Length of Bar - Percentage Frequency
Width of Bar - Duration of Attitude Change

Fig. 14.--Factors Which Appear as Satisfiers and Dissatisfiers at AT&T

International Business Machines Corporation

At IBM the approach to worker motivation is called job enlargement. The premise here is that "in modern industry there has been a direction of fractionalizing jobs at the expense of performance and morale,"[1] and that it is IBM's contention that this trend must be reversed by making jobs more challenging and more personally rewarding. J. R. Maher, of the company's Corporate Personnel Research Department, states that it is IBM's goal to "enhance employee satisfaction and performance" by so designing jobs "as to minimize or eliminate entirely feelings of boredom and monotony on the part of the individual."[2] Maher defines job enlargement as "organizing work so as to relate job content to the capacities of the individual worker,"[3] and explains how this is the IBM formula for employee motivation.

A very large part of the origin of IBM's concern with every worker's satisfaction and personal motivation lay in the personality of its founder, Thomas J. Watson, Jr. Now carried forward by the founder's son, Thomas J. Watson, Jr., who is Chairman-of-the-Board of the corporation as of this writing, the philosophy is best expressed in Watson's own words:

> You can always make as many promotions in a plant as you can elsewhere, but we have found that there are other things you can do to keep morale high. One technique is job enlargement. People running a nearly automatic machine tool all day making hundreds of the same item may have very little feeling of personal accomplishment. In IBM we fight this problem whenever practical by

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[1] J. R. Maher, "Job Enlargement Studies Inside and Outside IBM," (International Business Machines Corporation, December, 1968, Mimeographed), p. i.

[2] Ibid., p. 8.

[3] Ibid., p. 9.

> teaching our people to do their own set-up work when they change from one operation to another. In some cases they make up unit assemblies. In others, they do their own inspecting. We try to rotate the very boring jobs to break monotony. This helps a person to keep his sense of dignity, accomplishment and involvement.[1]

It can now be seen that IBM's "job enlargement" is almost exactly like AT&T's "job enrichment." Both of these giant companies acknowledge that people are the primary resource at stake in realizing corporate aspirations.

International Business Machines Corporation, like most large companies in America, uses opinion surveys as a tool for measuring employee opinions regarding their jobs, their employers (i.e., managers), and many other variables of the job. These surveys provide honest opinions from workers who are free to express themselves because of the confidential nature of the process. IBM's management uses the results obtained to determine "what is right" and "what is wrong" with the way things are going, and to make appropriate changes as the situation may warrant. Through the utilization of surveys the company has been able to measure results of all manner of policy implementation, of employee training, and of promotions.[2] And the management of IBM admits that the surveys have been significant enough to cause them "to have had changes of ideas about attaining the dual goals of high productivity and

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[1]Thomas J. Watson, Jr., A Business and Its Beliefs (New York: McGraw-Hill Book Company, 1963), p. 57.

[2]Allen I. Kraut, "Opinion Surveys: Turning Results into Action," Personnel (September-October, 1966), 20-27.

employee morale."[1] Demonstrated here is the definite value gotten from "feed-back" of opinions, attitudes, and over-all shop climate. Emanating from the ranks of the workers it is a most realistic measure of the situation at a given time.

Maher concludes his presentation of the IBM program by reminding his readers that this approach should not become a panacea which will compensate for otherwise poor management practices. "Job enlargement is a tool, and a tool only, to be used judiciously, hopefully toward improvements in employee performance and job satisfaction."[2]

Sears, Roebuck and Company

Sears has traditionally been considered a leader in most areas of business innovation. From the mail-order watch shop to today's modern and fashionable urban department stores, Sears has been a merchandising miracle. The giant retailer's responsibility for the development of the shopping center, for example, is merely one of the many instances of Sears' continual ability to make the right decisions at the right time.[3]

Based on a long-standing company policy that the dignity and individual worth of every employee would at all times be honored and held high, Sears commences its approach to motivating workers via the vehicle of self-motivation. Every store manager,

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[1] Ibid.

[2] Maher, "Job Enlargement," op. cit., p. 78.

[3] E. Jerome McCarthy, Basic Marketing: A Managerial Approach (Homewood, Ill.: Richard D. Irwin, Inc., 1968), p. 19.

no matter where he finds himself located, operates on the principle that he is a local and independent retailer, operating within the economic and sociological climate of his particular geographical area. While he is expected to adhere to strict and precise corporate standards, he is allowed the widest possible latitude in decisions pertaining to his operation. He is free to hire, to discipline, and to institute training programs. He may establish incentives and vary work-distribution. In short, he may manipulate a host of managerial and personnel related variables which will enhance or hinder his success as an executive.

Working at a Sears store, an employee finds himself thrust into a relatively high level of responsibility at the earliest possible time. He is expected to operate in a semi-autonomous fashion, with responsibility primarily to the customer and to the product specialty of his department. The company thus puts motivation entirely into the hands of the individual sales clerk, or worker, again, as in the case of the store manager, to allow his own inner motivational forces to react to a hopefully fertile environment.

A recent Sears college interview brochure states that the company's biggest offer to a future employee is opportunity, defined as "all the conditions favorable to provide the greatest possible growth and advancement." A large promise, one which requires much from the employee!

Texas Instruments

Texas Instruments was not one of the companies contacted

for the purpose of this thesis. However, as the motivation studies conducted by TI had been amply reported on in management literature for a number of years, it was felt that the adequate information available, and the scope and relative depth of the studies, warranted inclusion here.

The findings of M. Scott Myers, Texas Instrument's Manager of Personnel Research, grew out of a six-year period of research sponsored by the company for the purpose of determining "what motivates employees to work effectively."[1] The answers included items such as "a challenging job," "achievement," "growth," "enjoyment of the work itself," while dissatisfiers included mostly factors that are peripheral to the job, such as "work rules," "lighting," "coffee breaks," and "titles." Figure 15 shows a compilation of percentages of reported feelings.[2]

It is interesting to note that "work itself," so heavily endorsed as a prime motivator by AT&T and IBM, does not rank as leading satisfier or dissatisfier to workers at Texas Instruments. Rather it is failure versus success that seems to drive the TI workers to optimum performance, thus allowing for the reasoning that the job is merely a vehicle for self-actualization, and is in itself not terribly important. No comparison of Myers' findings to job enrichment programs is offered in his study, and it must be assumed that workers are relatively unmoved by the nature of the work at TI--but are well motivated to strive toward achievement.

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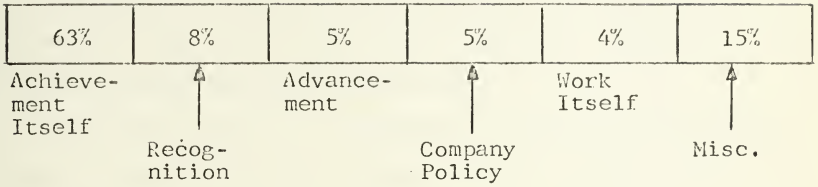
[1] M. Scott Myers, "Who Are Your Motivated Workers?" Harvard Business Review, XLII (January-February, 1964), 73.

[2] Ibid., p. 82.

FACTORS CONTRIBUTING TO FEELINGS OF ACHIEVEMENT



FACTORS CONTRIBUTING TO FEELINGS OF FAILURE

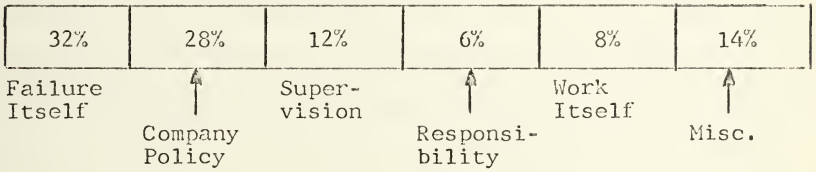


Fig. 15.--Work Satisfiers and Dissatisfiers at TI

Ford Motor Company

Paul A. Banas[1] writes that at Ford "we are finding out the hard way that we cannot lift out and apply the findings that pour forth from the human relations researchers indicating the importance of human relations. As important as the relationship is between supervisor and subordinate, there remains a missing link--the work itself."[2] Having admitted that the work is the important factor in employee motivation, Banas now turns his attention toward ways of achieving worker satisfaction and motivation through the work. He

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[1]Dr. Paul A. Banas is head of Ford's Personnel Research Section, heading that company's efforts to define employee motivation.

[2]Paul A. Banas and Robert Heckman, "Human Relations and Motivation" (paper presented at the Annual Institute of the Greater Detroit Chapter of the American Society for Training and Development, February 29, 1968), p. 5.

feels that at Ford two questions regarding the worker on the job must be answered: 1, What do we know about motivation and motivating people? and, 2, What do we know about fulfilling individual needs while meeting organizational objectives?[1]

The first question is answered by utilizing Maslowian principles of the hierarchy of needs, and by comparing Herzberg's theory of Maintenance and Motivation Needs to the needs of Ford. Banas models the Ford Company motivation system on a combination of Maslow and Herzberg concepts. The second question asked is felt to be "self-answerable," as a motivated worker, in the sense that his needs have been met, will meet his own expectations and demands. Thus, as a by-product to self-actualization, he contributes toward the attainment of corporate goals and organizational objectives.

The Ford plan for motivation further states that the supervisor as a leader has the constant responsibility to so manage the work of his subordinates as to identify sources of irritation and dissatisfaction as soon as they appear, changing the situation as necessary to gain maximum control over the forces influencing motivation.

Weyerhaeuser

Taking a somewhat different approach to worker motivation, this company operates on the premise that a thorough understanding of human motivation must rely on the total satisfaction of the workers' needs:

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[1] Ibid.

> Individuals whose basic needs are taken care of do not seek a soft and secure environment. They are interested in work, challenge, and responsibility. They expect recognition and satisfying inter-personal relationships.[1]

Built upon this understanding is the company policy of satisfying as many workers' needs as possible by providing an environment that will contribute to individual goal realization. Coupled to this policy is an attempt to realize job enrichment benefits, letting the work itself help in achieving self-actualization. Organizational needs are of course answered as a by-product to having happy workers. Additionally, heavy emphasis is placed on educating and coaching supervisors and lower level managers. This is achieved through extensive in-house schooling, and it insures that the rules of good management are at least well known, and will hopefully have a chance to be well applied throughout the company.

Weyerhaeuser trains its managers to become "agents of change," that is, leaders of organizational change. This correlates closely to the fundamental philosophy underlying job enrichment: if the situation warrants it, effect whatever change or changes may be necessary to make the job more meaningful.

An excellent summary of Weyerhaeuser management philosophy is contained in the company's "Manpower Policy." It states:

> Weyerhaeuser Company, in seeking to increase its profitability in all areas of invested capital, physical and human, believes that one of the most productive areas lies in the planned, organized, directed and controlled training and development of its human resources. It

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[1]Syllabus, Weyerhaeuser Management School (Weyerhaeuser, Tacoma, Washington, n.d.)

recognizes that future survival and growth rests on the vigor with which there is built and maintained an organization of committed, capable and knowledgeable people who will command respect for their high standards of integrity and who will provide a continuity of excellence in management.

To this end, it is the policy of this company, regardless of fluctuations in the economy, constantly to devote company resources to a forward-looking program of training and development.

Specifically, it is the policy of this company that:

1. Each manager shall create a climate in which individual self-development aimed at improved job performance and personal growth is actively encouraged, individually recognized, permanently recorded and appropriately rewarded.
2. Each manager shall be held accountable for the selection, training, development and promotability of his people.
   a. This accountability is being discharged satisfactorily only when he is:
      (1) forecasting annual projections of staffing requirements,
      (2) identifying the training and development needs of his people and specifying the end results to be achieved,
      (3) budgeting funds adequate to achieve those results,
      (4) allocating time sufficient for the training required,
      (5) evaluating all training activities in an effort to measure and improve the return on the company's investment in human resources,
      (6) endeavoring to develop qualified replacements for all key positions in his organization.
   b. The competence of each manager will be formally evaluated by his progress in discharging this accountability.
3. Each manager shall, as a general proposition, promote from within the company. When qualified men have not been developed, rather than compromise on ability, selection may be made elsewhere; but only after a determined and exhaustive in-company search.
4. Each manager shall incorporate training and development plans in his annual statement of goals and programs and standards of performance.[1]

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[1]Weyerhaeuser Company, "Manpower Policy," Executive Policy Manual, July 27, 1966.

Chas. Pfizer & Co.

Like others concerned with employee motivation, the Chas. Pfizer Company realizes that people are their most valuable asset. The company acknowledges that through the wisest use of this scarcest resource maximum performance can be realized.

Using an approach entirely different from any of the other companies so far discussed, Pfizer focuses entirely on supervisor and lower management training. The company personnel department conducts a series of seminars in traditional and contemporary theories and studies of motivation. Heavy emphasis is placed on the case study approach, as well as on the psychological ramifications of worker satisfactions as defined by Maslow and Herzberg.

The Pfizer company has found that by concentrating motivation experiments with management, or the leaders of their work force, the road to employee satisfaction is considerably smoothed because a well-educated and personally well-motivated leader will inspire his workers by his example. As pointed out by the company Personnel Supervisor, "a wise manager will make best use of his people."[1] And, in the philosophy of the Pfizer Company, to be a wise manager he must be versed in the "how" and "why" of motivation.

Goodyear Tire and Rubber Company

Goodyear subscribes to most of the conventional and accepted management and motivation theories, relying heavily on the

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[1]Janet Stern, Motivation Case Study Seminar (Chas. Pfizer & Co., Inc., n.d.)

teachings of men like Maslow, Likert, McGregor, and Herzberg. N. G. Ball, Corporate Vice President for Personnel, says that at Goodyear the principle applied is "the key to employee motivation is good supervision and the sort of managerial skill that draws out the best efforts of all."[1] By understanding human behavior, and the many stimuli that determine it, skillful managers can guide workers toward optimum self-motivation, this in turn influencing the upward or downward trends of production of this large manufacturing company. Table 4 shows the items affecting production at Goodyear.[2] By using a production centered method of eliciting maximum participation toward the achievement of greater economic rewards, through production, thus sales, Goodyear involves workers' motivation through the realities of the balance sheet.

TABLE 4

FORCES AFFECTING PRODUCTION AT GOODYEAR

PUSHES PRODUCTION UP	PUSHES PRODUCTION DOWN
Realistic Goals	Unattainable Goals
Desire for Accomplishment	Low Morale
Desire for Promotion	Workers' Indifference
High Standards (Individual and Work Related)	Low Standards
Good Management	Poor, Unskilled Management

[1]N. G. Ball, "Managing People," (Goodyear Factory Supervisional Conference, Goodyear Tire & Rubber Company, Akron, Ohio, n.d.), p. 1.

[2]Ibid., p. 5.

New York Stock Exchange

Small in size relative to its importance, the New York Stock Exchange is an unusual, at best a not at all typical, enterprise. Lacking the profit motive in the usual sense, this being provided by the efforts of the member companies, NYSE would seem to have, at first examination, a potential for extensive problems with personnel, morale, and motivation. However, because a great majority of the approximately 2700 employees are college, postgraduate, or professionally trained experts in many areas, there exists no pressing concern with organization-wide motivation at this time. It is assumed that most of the employees arrive at NYSE with a good deal of motivational drive, enough to bring them to this organization in the first place.

A recent NYSE study included a Job Analysis Record as a daily report to measure the activities of every worker. This was applied particularly to determine the productive time of those personnel engaged in the less peripatetic jobs at the Exchange. Closely monitored were the secretaries, the messengers, the janitors, and the like. The study was conducted for the purpose of effecting job simplification procedures which would, as an additional benefit, have an indirect influence on employee motivation as they would point to the actual relative time value of every task performed.[1]

NYSE feels that the real value of a study like that described will become felt in the near future. Presently planning an

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[1]"Supervisors' Work Analysis Program," (New York Stock Exchange, n.d.), Chapter IV, p. 4.

extensive expansion program, including the move to new and larger facilities, the Exchange's Board of Governors feels that with the expected difficulties to be found in the labor market of the future, a greater emphasis on worker motivation is necessary. With the predicted "economic explosion" of the seventies,

> NYSE will have to compete for quality people for whom the demand appears insatiable. There is a widely held school of management theory today which believes that the generic management functions of planning, organizing, directing and controlling are readily transferable to all types of business firms. The NYSE will have to recognize the value of its investment in people, the importance of its training programs, and the desire of young people not only to achieve a comfortable material standard of life but, more importantly, the satisfaction which comes from meaningful work. Thus there will have to be increased concern for human values, especially on Wall Street which many of our top graduates today consider the epitome of the 'Establishment.'[1]

New York Stock Exchange realizes not only the need to positively influence workers today, but the realities of a future of growth and growing labor market shortages. Motivating for results is thus doubly important. At present the management of NYSE enjoys a relatively highly motivated work force, for reason as indicated. This will perhaps change in the future, and necessary precautions are being implemented to prevent a possible breakdown of morale and organizational efficiency. The small number of employees, all located in one central location, makes that job considerably more realistic and possible.

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[1]"Planning Package," (New York Stock Exchange, n.d.), p. 8.

Honeywell, Inc.

Easily one of the most aggressive and progressive manufacturing and marketing concerns in America today, Honeywell devotes extensive energies, time, and material to worker and supervisor training in motivation. A full time "management instructor" is employed by the corporate personnel department to coordinate training at all levels within the company.

Basic to the Honeywell approach are two concepts:

1. Understand the Individual, and

2. Humanize the Work.

Addressing the first of these, the company believes that the responsibilities of management include many things which have to do with people, and are therefore perhaps not directly involved in the profit-making aspects of the corporation. Much of supervisory effectiveness depends, according to Mr. W. C. Thomas, upon that supervisor's "understanding of what makes up each individual--what makes him 'tick.'"[1] He feels that it is important for the supervisors to understand that people are different, and that there is a reason for these differences, and that these differences affect his relationships with each individual and his success in achieving high motivation and high productivity.

In the training of supervisors, Honeywell relies largely on Maslow and Herzberg, and feels that the drive to satisfy needs is man's greatest motivator. Additionally, the concepts of Theory X

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[1]W. C. Thomas, "Supervisory Series," (unpublished training syllabus, Honeywell, Inc., n.d.), p. III-1.

and Theory Y are taught, this with the hope that through being able to recognize personality traits in individuals the supervisor becomes better equipped to deal with them.

In the second category, that of humanizing the work, this company has employed the job enrichment techniques formulated by Robert Ford of AT&T. This of course includes the motivational drives and hygienic factors as seen by Herzberg, and provides the basis for the Honeywell philosophy of making the job "so important, in a personal sense, to every employee that he totally integrates his needs with those of the company."[1] Additionally, Honeywell feels that it is important to remove "demotivators" which may provide an obstacle to an employee, and provides examples of what these might include: physical force or coercion; the "or else" method of supervision; humiliation of workers; disruptive group conflicts; favoritism; restricted communication networks; overt expressions of hostility; et cetera.[2] By removing from the work situation those factors which tend to demotivate, i.e., to keep workers from working effectively, a supervisor assures himself a more responsive crew.

While it is crucial to remove demotivators, supervisors must be equally alert to introduce positive forces, or motivators. Honeywell believes this to be possible if, in addition to their understanding of human nature and their knowledge of contemporary theory, managers and supervisors:

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[1] Ibid., p. IV-4.

[2] Ibid., p. IV-9.

-know their employees and their aspirations so that they can help them reach their job goals,
-seek to match each employee closely to his work so that what he must do is also what he wants to do,
-will see that each assignment for each person contains something for him to learn as a part of his work.[1]

In an attempt to make work truly human, Honeywell identifies with the summary of motivation studies stated by Robert Golembiewski in his Men, Management and Morality. This summary states:

1. Work must be psychologically acceptable to the individual, that is, its performance cannot generally threaten the individual.
2. Work must allow man to develop his faculties.
3. The work task must allow the individual considerable room for self-determination.
4. The worker must have the possibility of controlling, in a meaningful way, the environment within which his task is to be performed.
5. The organization should not be the sole and final arbiter of behavior, both the organization and the individual must be subject to an external moral order.[2]

Other Companies

A number of other companies replying indicated that they are indeed involved in studying motivation within their organizations, some rather detailed, and some, because of various reasons, limited in scope and content.

The Eastman Kodak Company is involved in a number of long-range and in-depth studies of the type already described, but is

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[1] Ibid., p. IV-11.

[2] Robert T. Golembiewski, Men, Management and Morality (New York: McGraw-Hill Book Company, 1965), p. 87.

also deeply involved in measuring their return on investment in human resources. Much of their effort is concentrated toward advances in the underdeveloped countries of South America, and with the minority group segment of American society.[1]

William S. Vaughn, Chairman-of-the-Board of Kodak, expresses his concern for the future:

> Much of what can be said about improving the return in human resources in developing countries applies equally well to the segment of the American people living at or below the poverty line. The first two handicaps to overcome are the same. First, lack of preparation to deal with an increasingly complex and technological environment, and, compounding the problem, communication that are as real as if different languages were actually spoken.[2]

In this expression of concern is Kodak's view if the ever-increasing responsibility which big business will have in this country and in the world to insure a potential for jobs and for happiness for all the people.

Litton Industries says that the most important motivator is the understanding by all, from top to bottom in the company, "that absolute integrity must guide us in all dealings with all people."[3] Using the concept of the Christian ethic, this company feels that openness and honesty provide the necessary natural environment for motivation.

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[1]It is interesting to note that one of the companies replying to the request for information on motivation policy, the Olin Mathieson Chemical Corporation, sent material dealing exclusively to the expansion and further involvement of minority group employees.

[2]William S. Vaughn, quoted in Kodak Highlights (Eastman Kodak Company, February 1970), p. 4.

[3]"The Litton Industries Statement of Policy" (Beverly Hills, California, n.d.).

At McGraw-Hill, one of the country's largest publishers, the money motive is held high, with responsibility in the hands of the many profit-center managers. The company operates on the principle that each manager is responsible for motivating his own workers, with the company providing no specific corporate program. In addition, individual units of this highly decentralized operation sponsor their own training programs, with these containing emphasis on the human relations.

Other firms' efforts are for the most part similar to those reported on, with all of them focusing their attention on one or more of the generally accepted management theories. Most try to create an environment conducive to motivating the worker, enriching his job, and appealing to his desire for self-improvement.

Summary

H. Ross Perot, president of Electronic Data Systems Company, says that "there's no motivation like leaving a man alone to do his job."[1] Self-motivation is the clearly implied principle of his statement. Accordingly, to Perot, the worker "either has it or he hasn't," and nothing is likely to change his motivation to the contrary. This is a strong point of contention, to be sure, one in conflict with much of what is accepted practice. But, in this case if not in all others, it is one that clearly works.

Where Perot and perhaps the New York Stock Exchange are

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[1]"Perot Projects," The Washington Post, March 10, 1970, p. B1.

blessed with a work force that exceeds the national average in intelligence, drive, and self-actualization potential, most companies are not so fortunate, and must rely on their efforts to find ways of involving and motivating their workers. Self-help, job enrichment, and supervisory training are predominant methods.

Minnesota Mining and Manufacturing Company, on the other hand, reports that "our management has not gotten involved with the various gimmicks and fads that periodically sweep the business scene, i.e., Zero Defects, Job Enlargement, etc.," and that "the individual is responsible for both his own motivation and development."[1] A Pontius Pilate attitude expressed by one of the great corporations of America!

No matter what attitude is expressed by individual or corporation, it is evident that from one end of the spectrum of thought to the other, business enterprises are clearly concerned with their workers' motivation. Table 5 reveals the number of approaches that are in actual use, as reported by the respondents to this thesis' research, while Table 6 lists those management and motivation theorists whose influence is held important.

It is interesting to note that none of the companies reporting named Robert Blake andJane Mouton, or listed the managerial grid as one of their methods for managerial and supervisor training. Table 7 arranges the approaches listed in Table 5 into two categories, one that is employee oriented and one that is management

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[1]Letter from Dr. Paul E. Wernimont, Personnel Research Department, Minnesota Mining and Manufacturing Company, February 18, 1970.

oriented. It shows that a great majority of the attention is indeed given to the worker. The fourteen cases of management development consisted of in-house seminars, case study analysis, and company-financed, off-duty college courses in management and human development and behavior.

TABLE 5

METHODS OF MOTIVATING USED IN AMERICAN INDUSTRY
(as reported by thirty respondents)

APPROACH TO MOTIVATION	TOTAL NBR TIMES REPORTED
Job Enrichment	14
Management Development & Supervisor Training	14
Self-Motivation	10
Employee Training	7
Opinion Survey Evaluation	5
Management by Objectives (Mutual Goal Setting)	5
Money Incentives (all types)	5
Delegation of Authority	4
Work Simplification Methods	2

NOTE:
A total of sixty-six methods reported reflects the use of two or more of the methods by most of the respondents.

TABLE 6

MANAGEMENT AND MOTIVATION THEORISTS
INFLUENCING CORPORATION MOTIVATION POLICIES
(number of times named by thirty respondents)

NAME	NUMBER TIMES NAMED
Frederick Herzberg	13
Douglas McGregor	9
Abraham Maslow	9
Rensis Likert	6
Robert Ford	5
Chris Argyris	4
Saul Gellerman	4
Frederick Taylor	3
Victor Vroom	2
Elton Mayo/Fritz Roethlisberger	1
Carl Heyel	1
Peter Drucker	1

TABLE 7

MOTIVATION OF MANAGERS AND WORKERS
(as reported by thirty respondents)

APPROACHES TO MOTIVATION	NUMBER TIMES REPORTED
Management Oriented Methods	14
Worker Oriented Methods	52

CHAPTER VI

CONCLUSION

The hypothesis of this paper required a sound basis upon which to build an appreciation of what American business is doing to identify and measure the degree to which its work force relates their personal goals to company goals and aspirations. It was necessary to lay an historical groundwork showing how the development of the management profession has given the manager certain "tools of the trade" with which to motivate, or to prod, encourage, and inspire his subordinates. These tools fall roughly into three areas, as described in Chapters II, III, and IV of this paper:

1. The history of management itself, showing how its foundations rooted in classical economic theory, together with the impetus provided by the industrial revolution, set the stage for the development of the "art," and later the "science," of management.

2. The growth of the human behavior school. This is based on the acceptance of the fact that man is the most important factor in the accomplishment of any mission.

3. Motivation as a part of man's nature. The management profession has adopted the findings of the clinical, social, and industrial psychologists to formulate the various programs which are designed for the purpose of maximizing profit through maximized effort. This requires motivated workers. Along with the discussion of what it is that motivates, it was important to list and discuss some of the key elements of the motivating factors.

Although man has been working for most, if not all, of his time on earth, it is only in light of discoveries about human nature, and recent studies of behavior, that anyone concerned with the organization, supervision, training, leadership, and management of people at work has had any concern at all with the "why" and "what" of the idea surrounding the fact that people do work even after their primary needs are met. Acknowledging that the primary reason we work is to keep from being hungry (to satisfy our primary needs), or, in a more sophisticated sense, to pay the mortgage and to raise and sustain the family, one soon learns that there are many other things, elusive and intangible, which motivate men to work. The behaviorists have provided a valuable analysis when they determined that man's motivation consists of factors related to 1, the work itself, 2, his thoughts about himself, and, 3, his feelings about his society. In light of these observations this paper has attempted to summarize some of the more important aspects of theory as it is applied today.

In examining some of the ways that existing theory is applied by several representative American business enterprises, it has been this paper's intention to show that theory can indeed be applied to real situations involving real people.

Because of the great importance that management theorists and social psychologists have given to the subject of motivation, it was obvious at the outset that companies expecting to operate in the economy as it exists--presumably for a profit--must feel that striving to motivate workers is either important, or it is

not. Certainly, however, some corporate opinion on the subject must surely be evident. As motivation is a combination of factors relating to the physical and social sciences, it is virtually impossible to quantify. In the sense of being evaluated at corporate headquarters it therefore seems rather difficult to assign a value to the expected rate of return on any implemented program for motivation. No company, certainly, can establish the present value of any program designed to motivate either the workers or the managers. Any value realized can be measured only indirectly as an ingredient of improved performance as it is reflected--hopefully--in the financial statements of the company.

Applied Approaches to Motivation

Table 5, on page 132, shows what approaches are currently being employed by the companies responding to the survey of this thesis. Three methods predominate:

Job Enrichment

As developed by Robert Ford of AT&T, Job Enrichment simply implies that it is the job, and the nature of the job, that motivates. In view of the expansion of technology and communications which we have witnessed in recent years, it is now known by management that a job for the mere purpose of having work is generally worthless. It is often no longer enough for even the lowest level worker. He expects to be motivated for his job, and he expects something beyond work for the purpose of making a wage. As discovered by researchers like Roethlisberger, Maslow, and Herzberg,

money alone does not do the job. Ford developed the premise that the job must be rewarding in itself, and must be satisfying to the worker. It must be so designed--enriched--as to trigger the inner motivations of the individual, and provide a basis for eventual self-actualization. It should be remembered, however, that, as discovered by M. Scott Myers at Texas Instruments, the job itself may not be terribly important if other requirements of the worker are not met and satisfied. Myers found that "achievement" and "failure" were more important than was the job itself.

Management Training and Development

Most American businesses place a high value on the training and formal education of its managers. It is an accepted principle that a motivated leader will inspire his subordinates to maximum performance. However, as demonstrated by Blake and Mouton, personal motivation in a leader needs in no way be a function of leadership, and may be totally irrelevant to his ability to motivate others. According to the Managerial Grid a 9,1 manager may be highly motivated toward getting the job done, but he defeats, rather than builds, the motivation of his workers.[1]

Self-Motivation

As observed by H. Ross Perot, nothing seems quite so successful as having someone look out for himself. Many employers use self-motivation as a very real and personal way to relate the work

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[1]See the Management Grid, page 90, for the various styles of managerial leadership as they relate to getting the job done.

to the worker. It is often very difficult. While one can readily see how a Sears' store manager, for example, can realize rather startling personal results from his level of self-motivation, it is understandable that a Ford production worker, on the other hand, might require a good deal more effort to feel that his personal involvement is important to the company. It is the company's responsibility to convince him of that fact. From the number of times that self-motivation was reported as a motivation tool, it can be assumed that this is exactly what companies are doing.

There is no reason to think that the other methods listed in Table 5 may not be every bit as important as the three indicated above. The sample used for this study, forty-four, may well be too small to point conclusively to the methods which are in fact most used in American industry today.

It is particularly noteworthy that while IBM and AT&T feel that job enrichment is a key motivator, many other companies may have found that any number of ways to motivate their workers may be better. Money, for example, can easily be the most successful motivator for production or time-clock workers, and will no doubt rank high with those companies that have demonstrated that it serves the purpose. As shown by the AT&T and Texas Instruments comparison, feelings about the job and about the means to enhance the job may vary greatly. The things that motivate, and the things that fail to motivate, can vary as much or more.

A Comparison of Attitudes

The various companies' reports of their approaches to internal motivation reveal a general attitude of American industry. In addition, and quite apart from the responses to the research question, many of the replies gave a rather interesting insight into specific companies' corporate personalities. It is evident that the role of the worker is held in a rather broad spectrum ranging from great concern to "couldn't care less." Additionally, the amount of research and thought, and the amount of work that has obviously gone into some corporations' motivation programs, is most revealing, and adds fuel to the thoughts regarding the range of importance in which the worker finds himself.

Also of interest is a look at those companies which seemingly aren't overly concerned with their workers' motivation. As indicated in Appendix A, many of the forty-four companies contacted responded with either a minimal, or insignificant, reply, or chose not to answer at all. Not addressing the "silent" group, it can be assumed from the comments in the sometimes very brief letters from the "minimal" group that interest in motivation has not absorbed a significant amount of management's time. Comparing this sort of attitude to that expressed by companies like AT&T and IBM produces a genuine and broad "range of concern."

It is obvious that many of the companies not devoting time and energies to motivation programs are successful in the market place. This indicates that motivation, per se, is not the final and principal answer to achieving corporate goals. It is not the

only effective way to get the task accomplished. Companies like Coca-Cola, Minnesota Mining and Manufacturing, and Sherwin-Williams must certainly be considered successful and important. All of them indicated a complete lack of concern with what their workers' level of motivation is.

Implication of Findings

Readings and research for the purpose of finding answers to the question of motivation clearly indicate that as applied there is too heavy an emphasis on managerial development. According to the psychologists and behaviorists there is no direct positive correlation between well-trained and well-motivated leaders or managers and the degree of motivation present among their subordinates.

At a time when many students of the contemporary socio-economic scene are addressing themselves to the question of change and renewal, it is felt that far greater emphasis on group action, and group functions, is both warranted and necessary. The great majority of the contemporary behavioral science scholars considered in this study, including those reported by various companies as being important to them in their management programs, have expressed the conviction that organizing and operating toward a realization

of organization renewal will be the single great cause célèbre of the manager's very immediate future.[1]

The Value of Motivated Workers

Today's worker wants to produce. He wants to be well led. He wants to be involved. He wants to feel motivated. Coca-Cola and 3M cases notwithstanding, it must be assumed that the various methods by which workers are motivated will remain important in the future, and will continue to require careful management attention. The discontinuity we are experiencing in every segment of society, however, will require a totally new approach to achieving positive motivation. Nothing in the replies of most of the companies here considered seemed to indicate an awareness or understanding of this fact!

"Catching Up"

There was no reference in the replies to the "new techniques" of management which are available. Like generals fighting the last war, it seems that management, as a profession, has not caught up to its full potential in utilizing the available tools. Computers were not mentioned, but it must be taken for granted that they are in very considerable use. Cybernetics, as a science of mathematically measuring and recording the feed-back in human

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[1]Reference to individual and organization renewal can be found in many places. Significant discussions are contained in Warren G. Bennis, et al., Interpersonal Dynamics (Homewood, Ill.: The Dorsey Press, 1968), and in John W. Gardner, Self-Renewal (New York: Harper & Row, Publishers, 1963).

systems, was not mentioned. None of the many other quantitative and heuristic methods known to be valuable to management received any mention. In short, the reports were as noticeable in their omissions as they were in their content. Operating in the "gray middle" of the managerial grid, managers must strive to "rise above." Only then will future effectiveness be assured.

The single most relevant observation to be made rests in the fact that management must accept the current social revolution, and reduce its attempts to resist change. Problems of resistance to change are as old as mankind. And it is relevant to note that this resistance is more apt to be found among managers than among workers. Here is where the problems lie, and this is what must be overcome.

A Further Observation

It must be assumed that the companies who, like 3M, report that they pay little attention to their workers' level of motivation are successful for reasons not known and understood. Can it be that little attention is paid because the existing management system is so organized as to evoke motivation without any special effort? Are some companies, like Coca-Cola and Hershey, run in such a closely-knit and paternalistic fashion that every employee operates on the premise that he is a partner to a great undertaking, offering a feeling of service and a sense of belonging?

One can only guess at what many forms of motivating their workers companies have found. It is evident from the findings of

this thesis that motivated workers and success as a commercial enterprise are not synonymous. It would therefore be unwise to dismiss the unconcerned.

A Management System for Motivation

An old adage has it that "nothing is so practical as a good theory." This certainly has proven to be the case in the management systems described in this report. Converted to practical use, the best of theories of men like Likert, McGregor, and Argyris has been used as a springboard to achieving internal motivation. And little else should be expected from the theorists.

Based on conclusions reached by examining the theories applied by leading companies, the model shown in Figure 16 is suggested as a possible "best way" to motivate. Figure 16 shows the interdependence and interrelationship of the major factors of satisfaction and motivation. The dual realization of personal and organization goals is the optimum desired result. Note that these goals are also interdependent and must be satisfied together. If only one set of goals is reached, a part of the other set, and often all of it, must be sacrificed.

A Final Thought

This thesis has not attempted to add any new theory to the already voluminous literature on management and motivation. It has attempted to look at how some of the existing theory is being used by American industry. It has demonstrated that management, as a profession, has not reached the possible limits of utilizing its

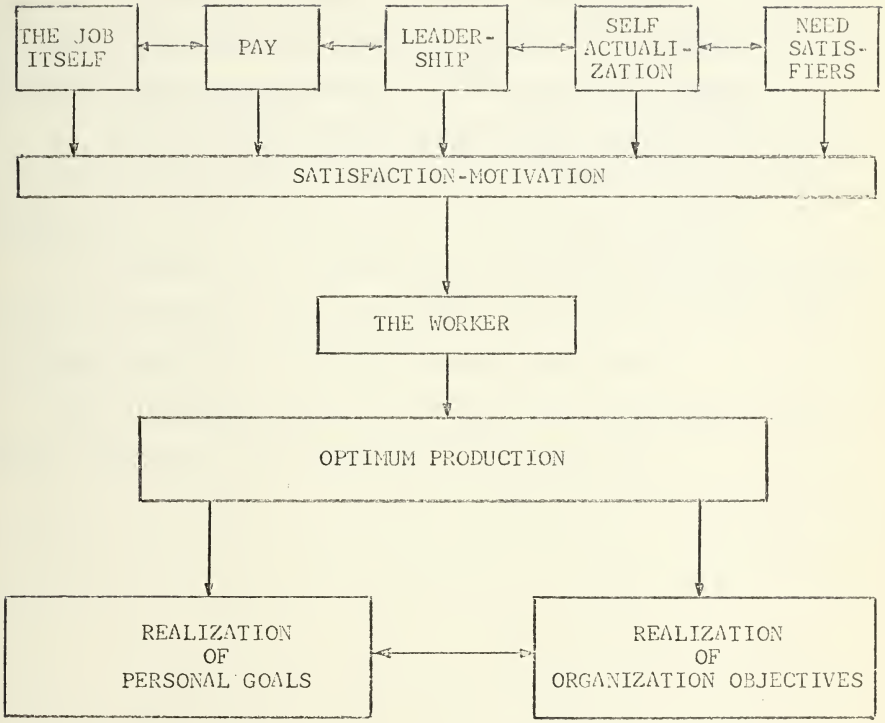

Fig. 16.--Management System for Motivation of Workers

most precious of all resources: the worker. It is within management's power to use the tools and the information made available by the new technology.

The following salient points are suggested:

1. A constant process of evolution, accepting and adequately coping with necessitated change, is required for management to continue to manage.

2. A learning process of, and an appreciation for, the realities of today's and tomorrow's world of discontinuity must produce continuing refinements of the management process.

3. Psychological motivation of workers must be understood.

4. The complexity of the interrelated motivators of the individual must be appreciated in their proper context.

5. Theorists and academicians exploring further into motivation to management applications must make themselves and their findings available to the American business world.

Then, perhaps, with a little luck and a great deal of God's help, management will better know "why men work."

APPENDIX A

SAMPLE LETTER REQUESTING INFORMATION
AND LISTING OF COMPANIES CONTACTED

6601 Jerry Place
McLean, Virginia 22101
February 1, 1970

Personnel Manager
General Telephone & Electronics
Corporation
730 Third Avenue
New York, New York 10017

Dear Sir:

As a candidate for a Master of Business Administration degree at George Washington University, Washington, D. C., I am conducting research into the practical applications of motivation theory as it is applied by leading American commercial and industrial enterprises. Hopefully this will culminate in a thesis entitled "Why Men Work."

I am very much interested in how your company has handled the subject of motivation, and what sort of program for measuring motivation you may employ. Any studies conducted and applied to how your workers identify with the goals of GT&E would be most helpful to me in my search for a meaningful comparison of how different companies have coped with this most important area of mutual concern. I would appreciate whatever material you can send me.

Thank you for your consideration of my request.

Sincerely yours,

/s/ Karl H. Hutzler

TABLE 8

COMPANIES CONTACTED FOR THESIS RESEARCH

COMPANY NAME	TYPE OF REPLY A-Substantial B-Insignificant C-None
Allied Chemical Corporation Box 70 Morristown, New Jersey 07960	A
American Telephone & Telegraph Company 195 Broadway New York, New York 10006	A
Atlantic Richfield Company 717 Fifth Avenue New York, New York 10022	B
Braniff Airways, Incorporated Exchange Park Dallas, Texas 75236	C
Campbell Soup Company 375 Memorial Avenue Camden, New Jersey 08101	B
The Coca-Cola Company 100 West 10th Street Wilmington, Delaware	B
Columbia Broadcasting System, Incorporated 51 West 52nd Street New York, New York 10019	C
Continental Baking Company 2301 Georgia Avenue, N. W. Washington, D. C.	A
Corning Glass Works Corning, New York	C
E. I. du Pont de Nemours & Company 1007 Market Street Wilmington, Delaware 19898	B

Eastman Kodak Company 343 State Street Rochester, New York 14650	B
Endicott Johnson Corporation Endicott, New York	C
Fairchild Hiller Fairchild Drive Germantown, Maryland	A
Ford Motor Company The American Road Dearborn, Michigan 48121	A
General Mills, Incorporated 9200 Wayzata Boulevard Minneapolis, Minnesota 55440	C
General Telephone & Electronics Corporation 730 Third Avenue New York, New York 10017	C
Goodyear Tire & Rubber Company 1144 East Market Street Akron, Ohio	A
Hershey Foods Corporation Hershey, Pennsylvania 17033	C
Honeywell Inc. 2701 Fourth Avenue South Minneapolis, Minnesota 55408	A
International Business Machines Corporation Armonk, New York 10511	A
Kaiser Industries 300 Lakeside Drive Oakland, California 94604	C
Litton Industries, Incorporated 360 North Crescent Drive Beverly Hills, California 90213	A
Lockheed Aircraft Corporation 2555 North Hollywood Way Burbank, California	C

McGraw-Hill, Inc. B
330 West 42nd Street
New York, New York 10036

Minnesota Mining and Manufacturing Company B
3M Center
St. Paul, Minnesota 55101

National Biscuit Company B
425 Park Avenue
New York, New York 10022

National Cash Register Company C
Main and K Streets
Dayton, Ohio 45409

New York Life Insurance Company C
51 Madison Avenue
New York, New York 10010

New York Stock Exchange A
11 Wall Street
New York, New York 10005

Olin Corporation A
120 Long Ridge Road
Stamford, Connecticut 06904

Penn Central Company B
1234 Six Penn Center
Philadelphia, Pennsylvania 19104

Chas. Pfizer & Company, Incorporated A
235 East 42nd Street
New York, New York 10017

Procter & Gamble Company C
301 East Sixth Street
Cincinnati, Ohio 45202

St. Regis Paper Company C
150 East 42nd Street
New York, New York 10017

Sears, Roebuck and Company A
925 South Homan Avenue
Chicago, Illinois 60607

The Sherwin-Williams Company B
101 Prospect Avenue, N. W.
Cleveland, Ohio 44101

Standard Oil Company of California — A
225 Bush Street
San Francisco, California 94120

Swift & Company — C
115 West Jackson Boulevard
Chicago, Illinois 60604

Tenneco, Incorporated — A
Box 2511
Houston, Texas 77001

TIME Incorporated — B
Time and Life Building
Rockefeller Center
New York, New York 10020

Transamerica Corporation — B
701 Montgomery Street
San Francisco, California 94111

United States Steel Corporation — B
525 William Penn Place
Pittsburgh, Pennsylvania 15230

Weyerhaeuser Company — A
Tacoma, Washington 98401

Xerox Corporation — B
Xerox Square
Rochester, New York 14603

Summary of Responses
of Forty-four Companies Contacted

16	A
14	B
14	C

APPENDIX B

TABLE 9

MAJOR CONTRIBUTORS TO 20th CENTURY MANAGEMENT SCIENCE, AND THE STUDY OF HUMAN BEHAVIOR AND MOTIVATION
(approximate date of major contribution)

NAME	CONTRIBUTION OR CONCEPTS
Chris Argyris	Levels of Maturity Theory, "psychological energy" as basis for organizational behavior (1957).
E. Wright Bakke	The Social System as a viable force of Organizational Behavior (1950).
Chester Barnard	Defined the executive process, theory of organization (1938).
Warren Bennis	Theory of organization change and renewal, sociology of change (1961).
Bernard Berelson	Psychological implications of the individual and society (1964).
Robert Blake	The Managerial Grid (with Jane Mouton), a scalar representation of styles of managerial leadership (1964).
Leland Bradford	T-group theory as it affects behavioral change (1964).
Ned Chapin	"Loop of Control" through automatic data processing techniques, management information systems (1961).
Ernest Dale	Analysis of contemporary management theories, human integration in organization (1965), quantitative analysis (1966).
G. B. Dantzig	Developed basis for applications of linear programming (1947).

William Dickson	Counseling program (from Hawthorne studies) as a management tool (1966).
John Diebold	Automation as a management tool (1952).
Peter Drucker	Management by Objectives, synthesis of practicality of contemporary theories (1954).
Robert Dubin	Psychology in Organizations, human relations in group experiences (1951).
Harrington Emerson	Efficiency Engineering (1913).
Henri Fayol	Functions and principles of management, first complete theory of management. The application of management principles to all types of human activities (1916).
Fred Fiedler	The theory of leadership (1967).
Mary Parker Follett	Managerial philosophy based on the motivations of individuals, group process approach to problem solving, human values in business enterprise (1930).
Robert Ford	Job Enrichment (1965).
Henry Gantt	Task and bonus systems, incentives as motivators, humanistic approach to worker training, the Gantt Chart (1901).
John Gardner	An intellectual appraisal of renewal and change (1963).
Saul Gellerman	Interpretive studies of psychology and motivation (1963).
Frank and Lillian Gilbreth	Motion study, work simplification (1900).
Frederick Herzberg	Motivation-Hygiene theory (1959).
George Homans	Physical-Cultural-Technological social system theory (1950).
Harry Hopf	Management for optimum results, optimology applied to human resources (1935).

Harold Leavitt	Group and organizational psychology, industrial aspects of human interaction (1958).
Kurt Lewin	Group dynamics, philosophy of field theory approach (1948).
Rensis Likert	Management systems that incorporate human resources with economic resources, importance of the human touch to establish new patterns of management (1960).
James Lincoln	The incentive system as a motivator (1946).
Ronald Lippitt	Field theory as applied to dynamics of change, T-group as an agent of change (1951).
Douglas McGregor	The nature of man: theory X versus theory Y, uses of management to achieve objectives (1960).
Abraham Maslow	The Hierarchy of Need as it influences human behavior (1964).
Elton Mayo	Sociology of group behavior (1927).
James Mooney	"Scalar principle," a grading of duties according to degrees of authority and responsibility (1931).
Hugo Munsterberg	First application of psychology in management (1910).
Karl Pearson	Statistical analyses and techniques, chi-square and standard deviation concepts applied to business and management (1914).
Fritz Roethlisberger	The human factors in management (1939).
Edgar Schein	Psychology of organizations (1965).
Oliver Sheldon	Professional creed for management, philosophy of industrial management (1923).
Clovis Shepherd	Small group behavior and interaction (1964).

Herbert Simon	Social, political, economic, and administrative psychology of group behavior (1947).
Robert Tannenbaum	Sensitive training (with Irving Weschler and Fred Massarik) as a means of building leadership skills (1961).
Frederick Taylor	Scientific Management (1911).
Lyndall Urwick	Consolidation of principles of management, practical applications of collected theory (1943).
Victor Vroom	Work and motivation, nature of the job as it influences individual and group behavior (1964).
Max Weber	Emphasis of social psychology in organization theory (1947).
William Whyte	Motivation and work, psychological and financial rewards as motivators, money as a driving force (1955).
Norbert Wiener	Systems analysis, information theory of management (1949).

APPENDIX C

MOTIVATION FOR A MILITARY CAREER
RESEARCH QUESTIONNAIRE[1]

November 3, 1969

The purpose of the attached questionnaire is to collect information for a group study project to determine "CAREER MOTIVATORS OF A MILITARY POST-GRADUATE CLASS".

Questions are concise and, with the exception of Part D, may be answered briefly. Specific instructions are provided for each part of the questionnaire as appropriate. Please answer all questions as candidly as possible. All replies will remain anonymous and are of no intended use beyond the scope of this study.

Please do not sign your name to this form.

Thank you.

Karl H. Hutzler
William D. James
John H. Kunkle
Fredrick G. Mitchell
David E. Ridley
Harvy B. Wareham

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[1]This questionnaire was administered to a class of thirty Navy-Marine Corps-Coast Guard officer graduate students. Tables 10, 11, and 12 reflect the findings of that research.

A. Background. Please complete or circle.

1. Branch of service (USN / USNR / USCG)

2. Designator / MOS _____

3. Active duty military service completed:

   a. _____ years commissioned.

   b. _____ years enlisted.

4. Source of Commission:

   a. Service academy

   b. NROTC (Regular)

   c. NROTC (Contract)

   d. OCS / AOC

   e. AOC / NAVCAD

   f. Other _____

5. Undergraduate degree _____ Major (s) _____

6. Prior Post Graduate Experience Yes / No Major (s) _____

7. Have you had full time civilian occupational experience? Yes / No

   What field: _____ Length of employment: _____

8. Do you come from a career military family? Yes / No

9. In your opinion, what was your family economic background?

   a. Underprivileged

   b. Average

   c. Privileged

10. How much of your active duty military service has been away from your home or family?

   a. Less than 2 years

   b. 2 years but less than 4

   c. 4 years but less than 6

   d. 6 years but less than 8

   e. Over 8 years

B 1. Below is a list of factors which may have positive influences on your motivation toward a military career. Please select the top five and rank them numerically (1 to 5) in order of their positive influence on your attitudes.

- [ ] Promotion opportunities
- [ ] Pay and fringe benefits
- [ ] Wife's attitude
- [ ] Retirement
- [ ] Interesting and diversified work
- [ ] Opportunity to lead / manage
- [ ] Leisure
- [ ] Family separation
- [ ] Travel
- [ ] Family movement
- [ ] Military prestige
- [ ] Social life
- [ ] Security
- [ ] Quality of superiors and contemporaries
- [ ] Other _____
- [ ] Other _____
- [ ] Other _____

B 2. Below is a list of factors which may have negative influence on your motivation toward a military career. Please select the most negative five and rank them numerically (1 to 5) in order of their negative influence on your attitudes.

- [ ] Promotion opportunities
- [ ] Pay and fringe benefits
- [ ] Wife's attitude
- [ ] Retirement
- [ ] Interesting and diversified work
- [ ] Opportunity to lead / manage
- [ ] Leisure
- [ ] Family separation
- [ ] Travel
- [ ] Family movement
- [ ] Military prestige
- [ ] Social life
- [ ] Security
- [ ] Quality of superiors and contemporaries
- [ ] Other _____
- [ ] Other _____
- [ ] Other _____

[illegible] subsidiarily - 1 to 5 [illegible] the following values [illegible] place on your [illegible]

- [ ] Increases my value to the military and the country
- [ ] Increases my military career potential
- [ ] Increases my post-retirement earning power
- [ ] Increases my ability to [illegible]
- [ ] Increases my bargaining power for future assignments
- [ ] Broadens my overall intellectual outlook
- [ ] Easy to [illegible] duty while at school
- [ ] Other _____

Assuming you already have your postgraduate degree, please describe the circumstances under which you would voluntarily leave the military service before retirement, disregarding family crisis or promotion non-selection

_____

_____

_____

_____

_____

_____

_____

_____

TABLE 10

QUESTIONNAIRE RESPONSES INDICATING POSITIVE MOTIVATORS

Motivation Factor	Total Number of Responses*	Breakdown of Responses (choice)		
		1	2	3
Interesting Work	26	8	12	5
Opportunity to Lead and Manage	22	7	8	2
Retirement	18	3	2	5
Travel	15	1	1	5
Promotion Opportunity	14	2	5	4
Security	13	4	1	0
Social Life	9	0	0	2
Pay and Fringe Benefits	8	1	1	3
Quality of Superiors and Contemporaries	7	1	0	0
Wife's Attitude	4	0	0	1
Military Prestige	4	0	0	1
Others	8	0	0	0

*Responses ranking lower than third choice are included in this total.

TABLE 11

QUESTIONNAIRE RESPONSES INDICATING NEGATIVE INFLUENCES

Motivation Factor	Total Number of Responses*	Breakdown of Responses (choice)		
		1	2	3
Family Separation	25	15	4	2
Family Movement	24	2	10	4
Pay and Fringe Benefits	19	4	5	4
Quality of Superiors and Contemporaries	14	2	0	4
Leisure Time	13	0	4	2
Wife's Attitude	13	3	0	4
Military Prestige	10	0	2	2
Promotion Opportunity	9	0	1	6
Social Life	8	2	0	1
Travel	6	1	1	0
Others	6	0	0	0

*Responses ranking lower than third choice are included in this total.

TABLE 12

QUESTIONNAIRE RESPONSES INDICATING VALUE OF POST-GRADUATE SCHOOLING

Value of Importance	Breakdown of Responses (choice) 1	2	3
Increases Value to Military and Country	8	5	1
Increases Military Career Potential	8	9	7
Increases Post-Retirement Earning Power	15	8	5
Increases Ability to Absorb Knowledge	0	0	2
Increases Bargaining Power for Future Assignments	0	5	7
Broadens Over-all Intellectual Outlook	4	3	8
Easy Tour of Duty (while at school)	0	0	0
Other	0	0	0

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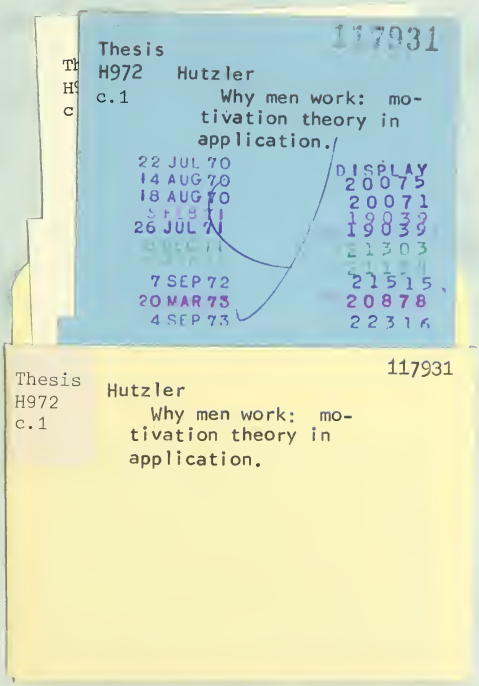
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